

MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXXIV. No. 4.
WEEKLY.

BALTIMORE, AUGUST 19, 1898.

\$4.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Manufacturers' Record.

PUBLISHED EVERY FRIDAY BY THE
Manufacturers' Record Publishing Co.

RICHARD H. EDMONDS, President.

OFFICE: MANUFACTURERS' RECORD BUILDING,
BALTIMORE.

RICHARD H. EDMONDS,
Editor and General Manager.

THOMAS P. GRASTY,
General Staff Correspondent.

SUBSCRIPTION, - - - \$4.00 a Year.
TO FOREIGN COUNTRIES, - - 25c. 6d. a Year.

BALTIMORE, AUGUST 19, 1898.

Unity of Southern Ports.

In commenting upon the recent editorial in the Manufacturers' Record upon co-operation of the Gulf ports, in which it quoted from interviews from Mr. Alexander R. Smith, of New York, and Mr. J. H. Hawley, of Galveston, the Galveston News says:

The Baltimore Manufacturers' Record is known to be a well-wisher of the South. Its watchfulness of trade conditions incident to and productive of Southern prosperity command the gratitude of this people. . . . The Manufacturers' Record sees that there is no reason why New York should be any longer the only pebble on the American beach; that its death-warrant is not yet in preparation and need never be; that it is a question of fighting each other as between American ports, South or North; that the country has reached a stage in its progress where many ports are not only needed, but demanded, and that prospective signs of trade expansion make these ports secure in their commanding positions. But there is a proviso always that there shall be unity of action behind each port, or between those cousins germane to each other by reason of their location, in order to reach out and control the ports incident to the readjustment of commercial conditions over the United States. Mr. Smith and Mr. Hawley gave fresh inspiration to the principle advanced by the Manufacturers' Record. Each port has itself to blame if it does not get what is justly coming to it in the new distribution and adjustment going on. It is no time for spite work, underminings, grasping for artificial props or depending on favoritism. Such tactics imply inability to understand the rudiments even of the plain business situation. Mr. Smith warns New York that she wants no more of such tactics, and Mr. Hawley would have Galveston profit from such lessons of experience by "working together as we have been all this while, or as we should have been." All Texas, all of the Southwest and away up into the new middle West as far as California are interested in the Gulf ports of this State, more so now that "the strong, brawny islands over which our flag shall wave will begin springing to the front commercially."

The Manufacturers' Record is pleased to note the able seconding of its efforts from the direction of Galveston. The spirit which animates the editorial of the Galveston News is largely dominant in that city, and to it one must look for much of the explanation of the strides which the Texas port has been making in recent years. Let every Southern port cultivate a similar spirit. The experience of New York, which has fallen into the habit of depending upon artificiality, is a warning to other ports. Artificiality does well enough as a supplementary agency in the development of a port, but too much dependence upon it is likely to result in a neg-

lect of natural opportunities and in the maintenance of customs, which, efficacious at one time, become impediments under changed conditions.

And Now to Business.

Hostilities against Spain have practically ended. Though a state of war will probably continue for two or three months, the dramatic movements which have for the past three months diverted the attention of the people of the United States from business and industry have played their full part. Since the first week in July it has been evident that peace would shortly come. This fact has perhaps discounted the effect of the signing of the protocol, but, nevertheless, that act has removed much of the uncertainty, and, it may be said, the timidity, which have acted as a drawback upon the progress of the country. To be sure, in certain lines immediately connected with the operations of the war there has been activity which, to a limited degree, has been felt in other directions, but it cannot be gainsaid that the revival of business in the early months in the year was decidedly checked by the war, however slight was the real occasion for any hesitation. However, the outcome of the war may be reasonably expected to more than compensate for the slackness of energies during the spring and summer.

As an advertisement of the United States, of American alertness, activity and enterprise it has been most potent. Moreover, the fact of the existence of such qualities has been forcibly impressed upon distant communities, among whom little was known of the United States and their resources, and in a more marked manner, perhaps, upon the nations of Europe, which had begun to talk of the commercial warfare against the aggressiveness of this country in trade. The result of this advertisement and lesson will be beneficial in connection with the relations of this country to others.

In the meantime, we may look for an expansion of creative undertakings at home. The achievements of the United States Navy have demonstrated the superiority of our workmanship in the construction of war vessels. The results of those achievements have taught the people of the United States the necessity for an enlargement of the navy. Close upon the building of new war vessels will come an increase in the merchant marine to meet the demands of a widening commerce. This will create renewed activity in iron, steel and lumber, and the traffic in materials for shipbuilding and the cargoes for foreign parts, thereby increased, will mean greater business for the railroads. This combination will furnish employment for many thousand men, and strengthen the markets for clothing, farm machinery, household utensils and other home manufactures. All parts of the country and nearly every line of business must share in this revival now promised, un-

less something absolutely unexpected should happen in the near future. Fortunate will be the man, or the community, which is prepared to take advantage of the opportunities thus created.

The South has particular reason for hopefulness. Its rich natural resources are of just the character which may be expected to be in demand in the next few years. Its ports are most convenient to the regions which will be subject more than ever to American developmental enterprise, especially when the completion of the Nicaragua canal shall lead the commerce of the world through waters washing Southern coasts. The railroads of the South are already planning to meet the demands of trade with Porto Rico, Cuba, other islands of the Caribbean and the Latin-American republics farther South. Individual firms and business organizations in Southern cities are considering the best means of reaching profitably the widening field of trade. Their efforts should be sustained by every man who knows what the South can do and who is determined to permit no artificial obstacle to exist. One of these artificial obstacles, the wrong impression held outside the South about the attitude of the South toward the country generally, has been removed by the war. It was artificial, but it was as effective as if it had been real. Unnecessary circumstances may create other impediments, but they may be prevented by wisdom and progressiveness.

In the list of heroes of the war are the names of such Southern-born men as Hobson, Bagley, Wheeler, Blue and Schley. Such war vessels as the Baltimore at Manila, the Texas at Santiago, the Charleston in the Pacific and the Nashville in the Gulf have sent the names of Southern States and Southern cities to the four quarters of the globe. Here is glory enough for the South. What is of more importance, a decidedly practical advertisement has been given. It should be followed by vigorous and persistent work for Southern commerce and industry. The glory will be preserved in history. The passing of excitement will enable men to give more heed to practical affairs in life. And now to business.

Industrial Training South.

At recent conventions in the South strong pleas have been presented in favor of the upbuilding of small industries. Able arguments have been presented and have been given wide circulation and uniformly hearty support by the press of the South. That the agitation is of no ephemeral character is shown by its extent. The Manufacturers' Record recently called attention to the fact that a local improvement society in Georgia was devoting its attention to technical training. That was an indication that the subject was being considered by other persons than those who are usually interested in it. During the past week additional indi-

cations have been presented. At the annual convention of the Georgia Agricultural Society the various phases of the subject were presented. President Pope Brown in his annual address said that there would be more factories in Georgia if the people knew how to operate them, and added:

Not satisfied with importing everything our soil will produce, we must import trained intellect and trained hands to operate our canneries and factories, and, unfortunately, we cannot get the best when we go outside the State, because they have employment at home. The importance of manufacturing all our purchases in our own towns and cities under the direction of our own boys is just as important and essential to the final and full development of the State as that the farmer should have his smokehouse and granaries at home instead of in the West.

State School Commissioner Glenn urged that the beginning of the training for the change should be made in the public schools. He said:

The simple truth is that our present system of public education in Georgia tends to lead our children to seek employment other than manual labor. The radical defect in our system is that it educates our boys and our girls to desire a way of escaping manual labor when there ought to be embodied in the system a training that will prepare the children to engage in some form or other of hard manual toil. For the next fifty years in Georgia the man who will be wanted is the man who can make the most intelligent use of his hands, along with his eyes and his ears. The skilled manual labor that will have to be applied in the development of our industrial resources ought to be trained here at home. We should not be driven to the necessity of importing the kind of labor that Georgia will want on her farms, in her manufacturing, in her foundries, in her machine shops and elsewhere. The potential citizen of the future will be the citizen whose hands have been trained to do things that the world wants done and that the world is willing to pay for. This training so necessary to our present situation must be provided for our children here at home, and while they are at school. It is necessary, therefore, to change the ideal that has grown out of our present system. Instead of training our children to escape labor with their hands, we want to train our children so that everyone of them will be potential for usefulness by reason of the fact that the public school has given to every child an intelligent skill that will enable it to find its place as soon as it is free from school.

An apt illustration of the advantage of manufacturing industries adjacent to the sources of the supply of raw material was given in the thoughtful and inspiring speech of Col. J. L. Orr at Clemson College last week. He contended that the South could reap as much advantage as ever from farming and whatever advantage there is in the money spent for manufacturing, and added:

Leaving aside the many arguments usually made to show the advantages which the manufacturing country offers, let us examine one minute what the difference is to the country that raises and manufactures one bale of cotton, as compared with selling it, to be worked up elsewhere. Suppose the bale weighs 500 pounds, and is sold at six cents; the country gets the benefit of \$30, to be distributed between the rent of the land, the labor, the fertilizer, the man who makes agricultural implements, etc.; not much profit to any of those engaged, and only \$30 is produced for the country. Now let a factory in the same country where the cotton is raised buy this cotton. It pays the same

\$30 for it that the foreigner would have paid, and the man who raised it gets the same benefit. Let the mill now manufacture it into, say, yard-wide sheeting, weighing four yards to the pound; it will pay out for labor, salaries, supplies, findings, etc., five and one-quarter cents per pound, \$26.25, in addition to the price of the raw cotton, or \$56.25. After deducting the loss by waste he will have, say, 1680 yards of cloth, for which he will receive from the jobbers today three and one-half cents per yard, or \$58.80, as against \$30 put in circulation in the first instance—the country has the benefit of \$58.80, or nearly double, the employee getting \$26.25, and the stockholder \$2.55 additional. And it does not matter, so far as the South is concerned, whether the mill is run at a profit or not, for the \$26.25 has to be paid out for manufacturing, in addition to the price of the cotton, and the country gets the benefit of it. If South Carolina sold to outsiders her 850,000 bales of cotton she would have \$49,980,000; in other words, she would be better off every year to the amount of \$24,480,000. Run these figures through your mind and you can realize what the South would be worth today if she manufactured her 11,000,000 bales of cotton, instead of one-tenth of it. Many of the objections which were most strenuously and dogmatically urged against cotton manufacturing in the South have been overcome by actual experience. The theory that the climate was unsuitable has been overcome by scientific machinery, and it is found that any temperature or degree of humidity can be produced at will.

The interest displayed by farmers in this important subject is full of promise for the South. That at this time the discussion of industrial training should be so pronounced in Georgia and South Carolina is undoubtedly explained by the energies which have been exerted in the past few months in the advancement of one particular form of industrial training in the founding of the textile school at Clemson and the textile department of the Georgia School of Technology. The enterprise shown in this direction has emphasized the value of technical training and will have far-reaching influence in the whole South. When farmers have been convinced that the establishment of a cannery, a cotton factory, a carriage factory and other industries in their neighborhood means a wider and a steadier market for their products, they will be more inclined to favor legislation and co-operative efforts that will encourage the investment of local capital in such undertakings or attract outside capital. The next step will be their purpose to teach their sons to avoid the overcrowded professions, or the driftless life of those who have been educated beyond opportunities, and to fit themselves for intelligent occupation in manufacturing enterprises. As the years pass the demand for trained hands and trained intellects will increase in the South. Those demands should be met acceptably by Southern boys.

Against Militant Dishonesty.

The Shelby (Ky.) Sentinel is justly incensed at the acts of the turnpike raiders in its county. It says:

Turnpike raiders are a shame and disgrace to any country, and particularly so to Shelby, which has so long been known for its morality, its culture and its law-abiding people. The owners of a turnpike are as justly entitled to the enjoyment of their property as is the owner of a house or barn, and any man who contributes to destroying the first is none too good to set fire to either of the latter. Raiding tollgates is a high-handed piece of lawlessness, and those engaged in it ought to be run down and punished. * * * Lawlessness must be stopped in Shelby, and vigorous measures should be resorted to at once. Protect all property of whatever kind and at whatever cost and punish the offenders against the law.

The Sentinel then discusses the expense of guarding the tollgates from the raiders. The item of such an expense when the tax levies are to be

made will be an effective argument against the raiders. If the people only knew that assaults upon property of any kind, whether it is a tollgate, a railroad or a manufacturing corporation, tend to prevent a decrease in the burden of taxation for the individual, even if they do not increase it, rights of property would be theoretically and practically better conserved everywhere. Communities which fail to observe the rights of property of others are not likely to be selected by investors and developers, however great their natural opportunities may be. There is too great risk. An instance of the ill-effects of class distinctions is given in the testimony of a witness in the case of the overtaxed property of Mr. John D. Rockefeller, at Mount Pleasant, N. Y. He said that the crusade against large holdings along the Hudson had been the most potent cause of a reduction in the market values. He said that the increased assessments had the effect of paralyzing the sale of property. The building of a railroad, the consequent establishment of industries, under normal conditions, increase the general value of property, and with that increase there is normally a decrease in the tax rate and a more general distribution of the taxation. The Shelby Sentinel is to be commended for its earnest work against militant dishonesty, for the disregard of property rights by turnpike raiders can only be classed as such. Such a policy as that of the Sentinel pursued in every community where the anti-corporation spirit begins to manifest itself will be of inestimable benefit and will be corrective of the evil. Crime cannot flourish amid publicity. Where a newspaper boldly calls attention to the facts and persistently urges plans of correction, the community will not long suffer.

In 1880 the imports of manufactures of iron and steel in the United States were valued at \$71,266,699 and the exports at \$14,716,524. In 1898 the imports had fallen to \$12,615,913 and the exports had risen to \$70,367,527. The conditions of 1880 have already been almost reversed, and under favoring circumstances the imports should be a constantly diminishing quantity and the exports a steadily expanding one.

Progress in the South.

[Wilmington (N. C.) Morning Star.]

Mr. Richard H. Edmonds, editor of the Baltimore Manufacturers' Record, is a recognized authority on Southern industrial statistics. He has kept in close touch with the industrial movement in the South, and with his many well-informed correspondents there is little, if anything, worth recording that escapes him. Several years ago he presented the story of the South's progress in a little pamphlet entitled "Facts About the South," showing what had been accomplished up to that time. He has since brought his facts and figures up to date, showing what has been accomplished up to the present time. As it is both interesting and instructive, we herewith present the substance of it as we find it in the Baltimore Sun. * * *

Mr. Edmonds is not a visionary or a romancer, but a cool, conservative matter-of-fact writer, who bases his views and conclusions on facts and figures well authenticated. He has never encouraged the "boom" which too often becomes a boomerang, believing that the South presents inducements enough for large investment of capital without any rainbow promoters or visionary manipulators.

When it is remembered that the section which shows this remarkable exhibit of progress was absolutely bankrupt at the close of the war, and destitute of everything save its natural resources and the indomitable pluck and perseverance and tenacious hopefulness of its men and women, we can form some estimate of the size of the grand achievement, and of the resources that made it possible.

And yet a good, fair beginning has not been made, for another decade will show a record of progress and development that the first decade cannot compare with.

INDUSTRIES AT AUGUSTA.

Enlargements and Improvements in Several of the Mills.

[Special Cor. Manufacturers' Record.]
Augusta, Ga., August 13.

The most important operation in industrial circles in this vicinity now under way is the enlargement of the Riverside Mills. Under the efficient management of Mr. George W. Stern, this institution has proven wonderfully prosperous, and at the last meeting of the stockholders it was determined to enlarge the plant. A force of workmen are now engaged in moving the iron warehouse, a structure 260x160 feet, a distance of 150 feet, to make room for the enlargement of the mill proper. The Riverside manufactures the waste products of other mills into cotton batting.

The Augusta Factory has petitioned the city council for more water-power. About a year ago they put in a Wood-Gayline wheel that increased their power sufficiently to enable them to make better speed and run 170 looms additional, which they purchased and are now operating. Having some unoccupied space in the mill building, they now contemplate putting in another wheel and filling this space with new machinery. It is probable that other and extensive improvements will follow, although President Phinizy does not talk about these. The Augusta Factory is one of the finest properties in the South, and with a progressive and up-to-date policy, such as he has determined to inaugurate, its earning capacity must be largely increased and it will resume its position at the head of the list of dividend-makers.

The Clark Milling Co., which was organized a short time ago with a paid-in capital of \$40,000, has gotten all its machinery in place and is ready to begin operations. The roller system was adopted, with Plan sifters for flour, put in by Barnard & Leas, Moline, Ill. Their meal-grinding machinery is the old-style burr stone. Their capacity is 250 barrels of flour and 2500 bushels of meal and grits per day. They have first-class facilities in every respect.

L. J. Miller & Co. will build a fine modern flouring mill on the site of their old one that was destroyed by fire some time ago. The structure will be of brick.

The Augusta Lumber Co. has just finished enlarging its plant and adding many improvements. This enterprising concern has recently been filling large orders for fine goods for foreign and domestic trade.

The Moore & Edenfield Electric & Manufacturing Co. has moved into a commodious building on Kollock street, and is now prepared to do all kinds of work in its line. It recently built the motors for the Summerville water works.

The Augusta Railway & Electric Co., by reason of its increased patronage, has found it advisable to put in new dynamos and other improvements at an outlay of \$25,000.

The electric railway to connect this city with Aiken, S. C., a distance of seventeen miles, mention of which was made some time ago by the Manufacturers' Record,

will be built, it is said, in the near future. It will pass through the villages of Bath, Langley and Graniteville, entering this city over the tracks of the North Augusta line. The power will be obtained by electrically developing the shoals of the Savannah. Philadelphia parties are backing the project.

Augusta's building boom is unabated. Its main features consist of an elegant row of residences built by Mr. Jacob Phinizy, fifty residences built by Mr. J. B. White, sixty-odd dwellings built for operatives by John P. King Manufacturing Co., three large standard fireproof warehouses and many residences, dwellings and stores in various parts of the city and suburbs. Never before was there so much building activity except last year, when there was a brick famine. H. P. M.

CORSICANA DEVELOPING.

The Advantages of the City in the Midst of the Texas Oil Fields.

[Special Cor. Manufacturers' Record.]
Corsicana, Texas, August 13.

Corsicana is the judicial seat of Navarro county, Texas. The county has a population of 50,000, of whom only 6300 are colored. The population of Corsicana is 11,000. The city is situated in the black land belt of the State, and is the best of its class in the State, and destined to become a manufacturing center of the Southwest. It offers great opportunities for the manufacturer and capitalist. Its churches and schools are up to the standard. It has four banks, a flouring mill, two cotton compresses, one large cottonseed-oil mill in operation and another planned, beside several smaller enterprises. All the business houses and residences are occupied, and more will be needed. Five lines of railroad diverge from here, giving good shipping facilities, and there are rich opportunities in the undeveloped territory between here and Sabine Pass.

Two artesian wells and numerous lakes furnish an ample supply of water to the city. A natatorium has become a necessity, and is believed will pay handsome profits to the builder. The oilfield, which was opened up three or four years ago, is being daily developed. Oil was found at a depth of 1040 feet, and 225 wells have already been drilled. The present daily output is 2200 barrels. The field so far developed extends ten miles. Messrs. J. S. Cullinan & Co., of Washington, Pa., have put in a pipe line and tanks here, and are supplying a great many steam plants throughout the State with crude petroleum for fuel. All the steam plants here are using the oil to great advantage, because of its convenience and cheapness. The firm mentioned above is also erecting here a large refinery, which will be in operation about November 1 next. It will have a capacity of a thousand barrels of crude oil daily, and will cost, when complete, \$150,000. As indicating the healthfulness of the city, the State selected it as the proper location for the State Orphans' Home, which now has five large buildings and cares for more than 400 orphans. The Odd Fellows of the State also selected this place as the site for their Widows and Orphans' Home. The contract has been let for an additional building for the institution. Every encouragement will be given to the building of cotton mills and other manufacturing plants, as well as to the building of an electric line of street railway. The labor is cheap, and the 100,000 bales of cotton raised in Navarro county annually offer raw material for the cotton mills.

The Commercial Club is prepared to give any detailed information about the city. S. W. BOGY.

SHIPBUILDING AND COMMERCE.

Views of an Eminent Authority on the Prospects Arising from the Present Situation.

The possible extent of shipbuilding in this country as a result of the present war, in part, has been the subject of extended comment in the press generally. The conclusion reached by most of the writers was that a shipbuilding "boom" without precedent might be expected, and that the number of vessels ordered would be more than the shipyards of the United States could accommodate. On this subject the Manufacturers' Record has obtained the views of the head of one of the largest shipbuilding and metal-working corporations in this country, who has devoted much time and attention to the subject, as well as to the commercial results of our new relations with Cuba and other Spanish possessions.

"As to the ability of our own shipyards to fill all government and individual requirements, I am satisfied," said he. "Undoubtedly the demand for new vessels is to be extensive, but it is a question as to the exact number. We know that the Pacific Mail Steamship Co., the Morgan Line and several other corporations have already ordered additions to their fleets. They are among the companies who leased or sold ships to the government for transports, auxiliary cruisers and for other purposes. Probably the United States will retain some. It will not require all, however, and the question arises if those not needed can be refitted and placed in a suitable condition for passenger and freight traffic. That remains to be seen. Personally, I believe the alterations can be made at a small expense and except in a few cases the vessels again placed in commission as good as when they were turned over to the naval authorities. If not, fully twenty ships, averaging from 3500 to 6000 tons each, must be built.

"The government requirements, I am aware, will be very large. The war has shown the necessity of a powerful navy, whether we annex additional territory or not. The people in the interior have been forced to realize the value of sea power as never before, and I believe their representatives at the next session of Congress will be found advocating any measures in favor of the navy. This session may adopt measures which will increase the number of battleships, cruisers and smaller boats far more than the estimates already decided upon. While our yards can take care of the contracts to be let this year, those for more warships may necessitate the formation of more shipbuilding companies, for we cannot afford to allow foreigners to construct our navy, even if most of our commerce is carried in foreign bottoms. Yes, there is an excellent opportunity for the establishment of more American shipyards, although, as I have already stated, our facilities are greater than might be expected, considering the insignificance of our foreign merchant marine.

"I doubt if the sentiment of the people at large would allow the government to award contracts for the warships of the future in any other country, for the war resulted in proving beyond doubt that we can make as staunch, swift and powerful specimens of marine architecture as any nation on the globe. Such performances as that of the Oregon, the work of the blockading fleets, the weeks of service of the larger vessels, without an hour scarcely to repair machinery or time to clean their hulls, demonstrate beyond a question what we can do in shipbuilding."

Regarding the question of dry-docks the same authority said:

"I know the administration has given this matter careful consideration. The navy officials feel that more are absolutely needed than have as yet been provided for. The board of examination has made a thorough examination of the sites proposed, and their report, as well as that of the naval officer, will have attention, for our difficulty with Spain has forced the officials at Washington to give more attention to the War and Navy Departments. The South should have at least one of the larger docks. If we retain Cuba as well as Porto Rico, a squadron will probably be stationed most of the time in Southern waters. This will be especially the case if the Nicaragua canal is built. The need of a dock adequate for the largest type of vessels is imperative under these circumstances."

The possibilities of commerce with the West Indies as a result of the war he believed depended much upon the work of Americans. "While Cuba, for instance, is rich in natural resources, it must be our capital, for a time at least, and the efforts of our own people which will increase the trade relations between the United States and the island. Its progress until the insurrection practically interfered was due in a measure to Americans who have gradually located on it. All that can be shipped from Cuba for the first year or so of any importance will be ore and hardwoods. Some time will be required to restore the sugar, tobacco and other plantations, and there is no money on the island. It has been sent away to Spain or elsewhere. The ore beds in the province of Santiago, however, are very rich and inexhaustible. Although as much as 300,000 tons have been exported from the mines to the United States in one year, the beds are almost untouched, you might say. There are probably many more deposits as yet unknown, but, as I have already stated, the veins known to exist are very extensive. A line of steamships can do a profitable business between this part of Cuba and the States, taking out machinery, food and miscellaneous products, and bringing return cargoes of this ore, for it is in good demand.

"As to the general trade with Cuba, I might say that it will offer an excellent market for our machinery, rails and railroad equipment, saying nothing of other manufactures. Railroad building there is still in its infancy, and improved transportation is absolutely necessary for the success of the great tobacco and sugar plantations. Probably most of the mileage on the island will have to be rebuilt, as doubtless much of it has been badly damaged or destroyed, as well as the locomotives and cars. There should be great opportunities for the sale of sugar-refining material, steam and electric motors, although we must depend, as already intimated, on American labor and capital to create such a market. Such interest has been aroused in Cuba, however, that I believe the close of the war will find a large number of Americans ready to try their fortunes in this country. Of course, the Southern seaports, being nearer the West Indies, should have the benefit of the commercial relations, but that will depend on their own exertions, and they must expect the competition of New York and other Northern cities, where the possibilities of this field are fully realized."

D. ALLEN WILLEY.

The production of pig iron in the United States during the first six months of this year was 5,909,703 tons, and in the first half of 1897 4,403,476 tons. The output of pig iron in the United Kingdom for the first half of 1898 was 4,432,893 tons, and in the same period in 1897 4,401,124 tons.

Industrial News from Birmingham.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., August 16.

The firmness noted last week in the iron market has continued, with a little added strength, until prices have appreciated from ten to twenty-five cents. The advance has been irregular, and, as to grades, it has been influenced by the individual situation of each interest thereto. Gray forge, for instance, can be had of one interest at \$6.25 in a very limited way on a mixed order, but if you wanted a lot of consequence you couldn't get it a shade less than \$6.50. Others are \$6.50 for any sized lots. Some are talking \$6.75, but a conservative report would be \$6.25 to \$6.50. No. 2 foundry is quoted at \$7.25, \$7.40 and \$7.50. The latter figures are not uniform price yet, but every indication points to their being current this week. The truth is that the make influences the price, as some brands command preference at stronger prices on account of per cent. of silicon to suit the purposes of buyers. Some No. 2 can be had yet at \$7.25, but a strong order would have great difficulty in securing registry at less than \$7.50. No. 1 foundry and the soft grades are just as sensitive as the above, and anticipating a mark-up. It has been a long time since the market has been in such a favorable position for the seller. Since the first of the month the leading interest has booked sales for more than 75,000 tons. The other interests have sold in proportion, and as the buying increases there is less contention about prices. A few days since one firm wired their selling agents to accept no order above 250 tons save "subject to confirmation." The result was a delay of orders for thousands of tons with the plea of "we are committed." If you consider that the present active demand comes on the heel of sales that foot up 80 per cent. of output for eight months, one can only concede the strength of the position. To this add the fact that the August report of stocks will show in this district a material decrease for the first time in several months, and you have a fresh ground for the confidence felt. Right or wrong, every iron man is full of the belief that the range of prices will be higher. Another significant pointer is the scarcity in iron warrants "for sale." That sign is taken down, for they are practically withdrawn from the market.

The export trade has taken on new life, and the orders have increased with the increased freight room now offering. As the opening of the cotton season nears us freight room becomes more plentiful, and export sales to cover room offered at living rates is a common thing. The past week one lot of 2500 tons went to Germany, to be followed by one of 2000 tons. The shipments on account of this trade will increase from the present to large proportions.

The steel mill is being pushed, and contracts for various parts of the plant are being let as fast as bids are accepted. At present local competition is figuring against other points for the contract for the ten huge stacks to be erected there. It is a plum the like of which has never heretofore fallen here.

At the rolling mills they have started up one steel furnace, and the others will follow. They have suffered some from deficiency of labor, but are filling the void from Western points. The minor industries are still busy, but there is nothing to call for special mention. The nut and bolt works report good business, and very encouraging prospects for a continuance of it. Some of the industries find an enlargement of capacity necessary to take care of business offering, and are

taking now the preliminary steps to that end. Rumors are again current of the intention of the Mobile & Ohio Railroad to have a terminus here, and, as it is good business sense, and common sense, too, the report is probably true. J. M. K.

New York and Philadelphia Iron and Steel Markets.

A sudden and encouraging change has come over the iron markets of the country during the past few days. The activity in finished products has been especially noticeable. As usual, plate and structural mills are leading, large contracts having been placed during the week for autumn and early winter delivery. The inquiries for light plates from Australia are for very large quantities. European requirements are also assuming greater dimensions, and within the next thirty days exceptionally large shipments of material will be made, to say nothing of engines and machinery implements and equipments. Plates and shapes have been advanced in price, and will doubtless further harden. Billets have moved up to \$17.50 asking price at mill, and agents pretend to say there will be a further advance. Even bar iron has taken on better quotations, though the larger mills are booking big orders at close to one cent per pound. The sheet-pipe, skelp and merchant steel mills are all doing well.

Pig iron has not felt any stimulus, though large sales have been made in Alabama and at several Northern distributing points. Bessemer has sold well, and is moving upward. Basic and low-phosphorus have sold in large lots, and the outlook is good. In a short time pig-iron buyers, it is expected, will be heard from, and a hardening in values is anticipated by some. It is questionable, however, in the minds of many whether, with a production of 11,000,000 tons per annum, an advance in selling prices can be reasonably expected to occur at an early date.

All conditions are favorable to a larger consumption. The ending of the war, the large crops, the sound financial conditions, the enlarging consumptive capacity, all point to a broadening consumptive demand, which hardening prices will help. Car builders bought largely during the past week. Bridge and locomotive builders did well. Steel rails having sold at \$17 are now firm at \$18. Though in midsummer, we are facing decidedly better conditions, which may have broader and deeper foundations than we suspect just at this time.

Foreign Industrial Notes.

The first works in Europe for the application of an American process for the manufacture of non-inflammable wood, erected by the British Non-Flammable Wood Co. near the Middlesex end of Wandsworth bridge, were formally opened last week. The process consists of removing the natural juices of the wood and replacing them with certain substances which not only make it fireproof, but also have antiseptic properties that prevent decay.

A novel method of laying permanent way is reported as being employed by French engineers on a line about 150 miles in length in Tunisia. The track is built in rail-length sections at one of the terminals, the rails and cross-tie sections being completely fastened together and then transported to the site of the work. The sections are laid in place by a traveling derrick, which moves forward one rail length for each section placed. It is stated that 117,000 feet of rails have been laid in one day by this method.

The construction has just been com-

menced at Cherbourg of a new type of submarine boat, the "Narvel," designed by M. Lanbœuf, a naval engineer attached to the arsenal. The boat will be cigar-shaped, of 106 tons, a little over 100 feet in length and about 18-foot beam. It will be propelled by both steam and electricity, but the latter will only be used under the water, when a speed of eight knots for three hours or five knots for nearly nine hours will be guaranteed. The vessel will be sunk or raised at will by hydraulic power.

A new coal-washing apparatus is now in vogue in Germany, the invention of Mr. Karl Mayer, of Barmen, Westphalia. The washed coal and its mud are passed along a chute from the plunger washing machine to a tank with sloping sides at a lower level, from which the coal is raised by a bucket chain to a series of draining tanks, while the water overflowing from this tank into another adjoining it is also raised by a centrifugal pump to the same tanks. In passing from the first to the second tank the water is freed from its mud by an inclined strainer. The clear water is let back to the washing machine to be used again.

The direct applications of electricity to the reduction of metals from their ores, to the production of calcium carbide and to electrolytic purposes are processes of the greatest industrial importance. Twenty thousand horse-power of electrical energy is to be installed at once at Sault Ste. Marie in Canada to operate furnaces for the production of nickel steel, the entire product having been contracted for by the great German gun and armor-making firm, Fried. Krupp & Co., Essen. The nickel ore is obtained in Canada at a distance of about 150 miles from the Sault, while the iron in unparalleled purity and abundance is within a distance of 200 miles.

A patent has been applied for in England on behalf of a Parisian inventor for an improved process of steel manufacture. A basic-lined converter is used, and chloride of sodium and carbonate of lime are added before running off the slag; the slag is then removed, and ferromanganese and carbon are added before the metal is poured. When an acid-lined converter is used there is no need to run off the slag. In the basic open-hearth process chloride of sodium and carbonate of lime are added to the charge before removing the slag, and a further addition, together with carbon, is made before pouring. When an acid-lined open-hearth furnace is used, the chloride of sodium and carbonate of lime are only once added.

The harbor and engineering works at Yokohama, Japan, are creating a demand there for machinery and quantities of manufactured material. Advices from there say that the capital already subscribed by a company is \$1,500,000. The same company has purchased the engineering works hitherto owned by the Nippon Yusen Kaisha, and considerable new machinery and tools will be required, as it is the intention of the new owners to enlarge the works and to equip them with all the appliances necessary for the repairs of marine machinery and ships. There are also improvements to be made at the port of Maga, near the entrance to the Bay of Tokio. These improvements are to be undertaken by the Ishikawajima Dock Co., of Tokio. Workshops with all modern improvements are to be erected, at an expense of nearly \$500,000. All the tools and machinery are yet to be purchased by the above companies, and, according to advices received, English and American-made tools will be taken into consideration.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Enterprise at Charleston Having Its Reward.

[Special Cor. Manufacturers' Record.]
Charleston, S. C., August 16.

During the first few weeks of the war, which is now happily drawing to a close, the Manufacturers' Record noted the spirit of enterprise of the people of Charleston, S. C., in building an electric road from Charleston to Isle of Palms, on the seashore. This road is now completed, and was opened for business on the first of August.

The construction of this road is of the finest in every detail. The roadbed is of the best, the bridges are of steel and are extra strong, the rails are the heaviest steel rails in sixty feet lengths, and the power-house is of brick and steel. The steam machinery is of the most modern type and best wearing quality. The electrical machinery is General Electric most improved generators; each motor car is equipped with two 50-horse-power General Electric Co.'s latest improved motors and capable of a speed of forty miles an hour. The cars are mounted on double trucks, and were built by Jackson & Sharp, of Wilmington, Del., and are said to be the finest cars on any electric line in this country. The company has nearly completed its terminus on Isle of Palms.

The residents of Charleston at once showed their appreciation by patronizing the road, thousands going to the ocean beach on Isle of Palms every afternoon, and the roads leading out of Charleston into Georgia and upper South Carolina have been quick to catch on, and have put on sale round-trip tickets to Isle of Palms, and large numbers of people from the interior are availing themselves of the excursion rates, and the Charleston & Seashore Railroad is often taxed to its utmost capacity to move the people. The road passes through the towns of Mount Pleasant and Moultrieville, and all of the modern forts defending the entrance to Charleston harbor.

These are the kind of enterprises with which to build up and develop the South, furnishing cheap transportation and amusement for the people and remunerative returns to the investor. It is said that the annual fixed charges will be very small for such a property as this, owing to this road being built during war times, when labor and material were cheap, greatly reducing the cost and consequently the volume of securities necessary to finance the enterprise. Dr. J. S. Lawrence is the president, and George B. Edwards, president of the Exchange Banking & Trust Co., of Charleston, S. C., is the treasurer of the company.

Chesapeake & Ohio.

The annual report of the Chesapeake & Ohio for the year ended June 30 showed gross earnings of \$11,788,557, an increase of \$1,080,374. The total expenses were \$7,982,307, an increase of \$695,538. The net earnings were \$3,806,250, other income \$71,817, and the net earnings of the Louisville line \$11,811, a total of \$3,889,878. The surplus after paying interest on bonds, \$3,148,772, discount, exchange and loss on elevator was \$618,510. The report states that while all classes of traffic show an increase, that of the freight is the most. The tons of freight carried one mile is increased 25 per cent. The rate per ton per mile decreased from 4.19 mills to 3.70 mills. Among the improvements made during the year was the rebuilding of the pier at Newport News

at a cost of \$101,982.80 above the insurance received, and additional pier at a cost of \$35,395.32 and improvements to the elevator at a cost of \$58,394.40.

B. & O. Washington Branch.

In answer to the suit asking for the employment of separate receivers for the Washington branch of the Baltimore & Ohio Railroad, the receivers of that company have presented a statement of the earnings and expenditures on account of the branch, the dividends, etc. Among their reasons for declining to pay further dividends on the Washington branch stock the receivers state that they were advised by their counsel that the payment of such dividends out of monies coming into their hands from sources other than their operation of the branch would give the holders of the Washington branch stock a preference in payment out of receivers' income which had not been authorized by the orders of the court.

New Road Incorporated.

The Goldsboro, Snow Hill & Eastern Railway, to be operated from Snow Hill, in Greene county, to Pantego, in Beaufort county, North Carolina, has been incorporated, with authorized capital of \$300,000. Messrs. J. B. McCormick and Alexander S. Bacon, of New York; J. W. Lynch, of Kinston; J. H. MacLeary, of Suffolk, Va.; G. W. Sugg and Josiah Exum, of Snow Hill, N. C., have been designated as directors for the first year.

Railroads in Mississippi.

The railroads in Mississippi are upon an upward grade. Reports filed at the capital show that in the second quarter of the year the Alabama & Vicksburg Railroad increased its net earnings over the first quarter by \$1413.40, and the New Orleans & Northwestern Railroad by \$35,325.15.

Alabama Car Service.

During July the cars handled in the territory of the Alabama Car Service Association numbered 21,392, an increase of 1762 cars over July, 1897. The total number of cars handled during the first seven months of this year was 163,077, an increase over the same period last year of 21,942.

Railroad Notes.

Tracklaying on the road to connect Thibodeaux and Napoleonville, La., began last week.

Work is progressing upon the terminal station, at Nashville, of the Louisville & Nashville Terminal Co.

The Kansas City, Fort Scott & Memphis Railroad is making considerable improvements at various points along this line in grading and filling.

The Illinois Car & Equipment Co., of Anniston, Ala., has received an order from the Louisville & Nashville Railroad for several hundred new cars.

At the Illinois Central shops, at Water Valley, Miss., a coal car, with the exception of its wheels, was recently built in three hours and fifty minutes.

A dispatch from New Orleans says that Mr. Oscar A. Poehler has been appointed general agent of the Kansas City, Pittsburg & Gulf at New Orleans.

A dispatch from Memphis says that plans are making for the organization of a company to develop the immigration business of the Nashville, Chattanooga & St. Louis Railroad.

It is reported again at New York that the Monon, that is, the Chicago, Indianapolis & Louisville Railroad, has been acquired by the Big Four, and that nego-

tiations are under way for the acquisition of the Cincinnati, Hamilton & Dayton Railroad.

In the quarter ended June 30, the Galveston, Harrisburg & San Antonio Railroad earned \$83,251 on passengers, and the Texas & New Orleans Railroad earned \$27,571.10 in the same source.

Judge G. E. Bryan, at Sherman, Texas, has announced that he would hold the matter of the sale of the Laporte road under consideration until September 3, when he would call it again before the court.

It is reported at Attalla, Ala., that the portion of the Nashville, Chattanooga & St. Louis Railroad extending from Gadsden, Ala., to Guntersville, Ala., thirty-five miles, has been acquired by the Louisville & Nashville Railroad.

Since January 1 the Plant system has spent \$100,000 in improvements at Jacksonville. These include a substantial warehouse, the renovation of older ones, bulk heading along the river front and changing of tracks in the yard.

It is announced that Mr. Warren P. Taylor will be appointed general freight and passenger agent of the Richmond, Fredericksburg & Potomac Railroad Co. Capt. Charles A. Taylor, the traffic manager of the road, and a brother of Mr. Taylor, died last week.

The Atlantic Coast Line has been granted a temporary injunction by Judge Simonton, staying the order of the North Carolina railroad commission reducing passenger fares on the Wilmington & Weldon Railroad. The hearing on the injunction will come up on October 16 at Greensboro.

Opportunities at Louisville.

Commenting upon the ordinance of the general council of Louisville, exempting new manufactories from taxation for a definite period, the Courier-Journal of that city reviews the advantages of Louisville, the cheap land, cheap living, low rents, abundant supply of labor, banking facilities, etc., and adds: "The large returns for invested capital of late years and the great financial successes have nearly all been made in manufacturing. The field is uncrowded here in the South, and it is time attention were called more plainly to it. The abundance of idle money here is shown by the large investments in gilt-edge bonds, and particularly by the large subscriptions to the new government loan. With capital content with such meager returns, there must be an abundance of funds for legitimate manufacturing enterprises which promise twice and three times as much. The brilliant success of the cotton and woolen mills, the wagon companies and similar enterprises that everyone recalls is proof that in the manufacturing field there is more for the investor than anywhere else and infinitely more for the city and State. We do not need to ask outside capital. Our own people should hasten to take advantage of the golden opportunity that is offered, and if they do not, they will have only themselves to blame."

Oil fuel was tried at sea for the first time in the British Navy at Portsmouth in July. Some months ago the admiralty sanctioned an experiment with the system invented by Mr. Holden, of the Great Eastern Railway, on board the "Surly," torpedo-boat destroyer, and in the interval various trials have been carried out in one of the dockyard basins.

The output of the Joplin (Mo.) district mines in the week ended August 13 was 8,611,700 pounds of zinc and 985,110 pounds of lead, valued in all at \$128,702.

COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

BALTIMORE AND CUBA.

Its Exporters Have an Advantage Owing to the Iron-Ore Business.

The trade of Baltimore is about to be greatly increased by the resumption of steamship service between this country and Eastern Cuba. The Manufacturers' Record learns on excellent authority that the importations of iron ore from the mines in the province of Santiago will be resumed in a few days. Over 90 per cent. of this ore is used by the extensive works at Sparrow's Point, near the city, and a fleet of steamships carrying from 3000 to 4000 tons each was in service until the war forced the suspension of operations.

Representatives of the American company owning the ore beds have recently completed an examination of its property, including the railroad to the harbor and the machinery, and report that only comparatively slight repairs are needed to resume shipments. It is not known as yet whether the Earn Line of vessels, which was in this trade, will again constitute the fleet, or some other company. The resumption of the business gives Baltimore an opportunity to export to Cuba at a great advantage, as the vessels employed are sure of return cargoes of ore, and freight rates can be made lower than from many other American cities.

Grain at New Orleans.

If the Gulf ports fail to maintain their export trade and to increase it it will not be because of a lack of earnest suggestions and frequent urging. Well-informed observers, both at those ports and elsewhere, realize that the North Atlantic ports do not propose to yield to the Gulf ports any outward-bound traffic which they may by any means secure for themselves. The competition is likely to wax stronger, and it behooves the Gulf ports to be ever on the alert to advance their own interest. One of the arguments advanced by the Eastern ports against the Gulf ports was the difficulty in handling grain in summer. This argument has been successfully met. Mr. J. T. Harahan, the general manager of the Illinois Central Railroad system, in a recent interview stated that the Illinois Central Railroad has demonstrated this season a very important factor in the handling of grain through New Orleans, that is, the adaptability of this climate to grain handling during the summer. The elevators all this summer have been handling large quantities of grain, the first time such a thing has ever been done there at this season of the year.

Direct Cotton Exports.

An extension of direct importations from Southern ports to Manchester, England, is looked for by "Cotton," of that city. It bases its hopes upon the announcement that a regular line of steamers is to run between Charleston and Manchester at intervals of three weeks, beginning in October, which will be an addition to the fortnightly service commencing in September between Newport News and Norfolk and Manchester, and the continuation of the service from New Orleans and Galveston, with sailings at intervals from Mobile and Brunswick, Ga.

The Month's Commerce.

The value of the imports of merchandise in the United States during July was \$50,674,366. This was a decrease of nearly \$3,000,000 from the imports of

July, 1897. The decrease is in the imports free of duty, as the dutiable imports increased nearly \$7,000,000. The exports in July, 1898, were \$72,486,853, an increase of more than \$1,000,000 over July, 1897. The excess of exports over imports during the month was \$21,812,487. The imports of gold for the month were \$2,613,530, an increase over July, 1897, of \$1,674,579. The exports were \$1,497,013, a decrease of \$3,965,856. The excess of exports over imports was \$1,116,517. The imports of silver were \$3,026,192, an increase of \$332,328. The exports were \$4,879,783, an increase of \$174,629. The excess of exports over imports was \$1,853,591.

Jottings at the Ports.

Plug tobacco is being shipped in large quantities from Louisville, Ky., to Alaska and Hawaii.

It is announced that the steamship Olinda will ply regularly between Galveston, Texas and Santiago de Cuba.

Five hundred carloads of white-oak staves from points along the Yazoo & Mississippi Valley Railroad will be shipped from New Orleans to European ports.

The first cargo of steel rails from Baltimore to Bluefields, Nicaragua, was carried by the Norwegian steamer Alabama. The cargo came from the Carnegie Steel Works.

Mr. Daniel Ripley, general agent of the Lone Star Line, announces that its Galveston-New York service will be resumed as soon as the company's boats are released from the government service.

It is announced that the Mallory Line will resume its service between New York and Galveston, the first steamer sailing from New York on August 20, leaving Galveston on the return trip on August 31.

During the month of July seventy-two steamships, one ship, three barks and five schooners arrived at New Orleans, and seventy-three steamships, three barks and four schooners departed. Of the departing vessels, seventy carried cargoes and eight were in ballast.

Jacksonville's Electric Plant.

During the first half of this year the income from the city electric-lighting plant of Jacksonville, Fla., was \$30,294.56, of which \$21,014.56 were cash receipts from commercial lighting and \$9280 credit by public lighting at commercial rates. The operating expenses were \$16,420.45 and expenditures for construction, replacing of new lines, etc., were \$7102.11. Jacksonville is lighted by 120 2000-candle-power arc lights and 320 30-candle-power incandescent lamps, besides several arcs in the city and other buildings and several hundred incandescents of sixteen candle-power.

The erection of a mill is proposed at Edenton, N. C., and the citizens have inaugurated a movement for a stock company. Commission for a charter has been issued to the Edenton Cotton Mills, with capital stock of \$80,000, and the incorporators are Messrs. W. D. Pruden, C. S. Vann, J. A. Williams, J. N. Pruden, F. A. White, R. F. Cheshire and others.

The Atlanta Chamber of Commerce is discussing a plan of sending a special commissioner to the West Indies to build up Atlanta trade in Cuba and Porto Rico.

The production of coke in the United States increased from 11,780,777 short tons in 1896 to 13,288,984 tons in 1897.

The Cannon Manufacturing Co., of Concord, N. C., has declared a semi-annual dividend of 5 per cent.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

New England Mill Men.

The "Transactions of the New England Cotton Manufacturers' Association," at the annual meeting, held in Boston last April, have been published, under the editorship of Secretary C. J. H. Woodbury. In the publication are included an address by President Russell W. Eaton, of Brunswick, Me., a record of the routine proceedings and the following papers, with the discussion of them: "Flax Culture and the Manufacture of Linens to Take the Place of Coarser Cotton in New England," by Jones S. Davis, of Holyoke, Mass.; "The New Prior Roller Gin," by Thos. W. Prior, of Philadelphia, Pa.; "The Round Bale at the Mill," by Stephen N. Bourne, of Manchester, N. H.; "One Hundred Years of Ginning and Baling Cotton," by George A. Lowry, of Boston, Mass.; "The Excelsior Spinning Frame," by A. T. Atherton, of Pawtucket, R. I.; "Steaming Filling," by Edward A. Mongeon, of Blackstone, Mass.; "The Shuttle-Shifting Loom," by Randolph Crompton, of Worcester, Mass.; "Slashing," by George F. Tryon, of Fall River, Mass.; "Bastard Reed for Cotton-Weaving," by Arthur Parkinson, of New York city; "Our Export Trade in Cotton Goods," by Christopher P. Brooks, of Lowell, Mass.; "The Nicaragua Ship Canal," by Gardiner C. Sims, of Providence, R. I.; "Cotton Yarn Mill Costs," by Wm. Whittam, Jr., of Charlotte, N. C.; "Early Inventions Upon Copper Printing Rolls," by Samuel Webber, of Charlestown, N. H., and "What I Don't Know About a Cotton Mill," by Malcolm Campbell, of Woonsocket, R. I. An additional feature of interest in the transactions is the appendix to Secretary Woodbury's report containing the record of the proceedings in connection with the presentation to the Philadelphia Textile School of the Pennsylvania Museum and School of Industrial Art of the bronze bust of George Draper. A full description of the bust is presented, with handsome half-tone illustrations and the speeches of Messrs. C. J. H. Woodbury, Wm. P. Pepper, Charles H. Harding and Col. Albert Clarke on the occasion.

To Add 5000 Spindles.

There will be added to the Dixie Cotton Mills, of La Grange, Ga., a 5000-spindle equipment. This equipment will embrace finishing lappers, revolving flat-top cards, drawing, slubbing, intermediates, speeders, ring-spinning and winders, etc. All of this machinery has been contracted for, and is expected to arrive at the mill within two weeks, when it will be immediately placed in position. No enlargements of building will be necessary to accommodate the additional machinery.

May Have a Southern Branch.

About the first of the year it was reported in this department that the New York Mills, of New York Mills, Oneida county, New York, had in contemplation the location of a cotton manufactory in the South, but the project was abandoned at the time. During this week the Manufacturers' Record received a letter

from Mr. W. S. Walcott, president of the company mentioned, who says: "At the beginning of the war with Spain we dropped all matters pertaining to the erection of a Southern mill. We have little doubt but that we shall resume our arrangements for such an establishment, but as yet have taken no definite steps. We shall not be very active in the matter at least before the first of the year. It is probable that after that time we shall take the matter up and come to a definite decision."

To Expend \$50,000 for Improvements.

The directors of the new Eagle & Phoenix Mills held a meeting at the office of the company in Columbus, Ga., on the 9th inst. Several matters of importance to the plant's welfare were given consideration. Among these was the proposed improvements, and an expenditure of \$50,000 was authorized for this purpose. Arrangements for making these improvements will be made very soon, and further particulars regarding them will then be announced. At a meeting held on the 11th inst. the company authorized the directors to issue the \$500,000 worth of bonds as planned and announced in the plan of reorganization. The mills are now in full operation, employing 1300 hands.

Expects to Add 5000 Spindles.

The Stonewall Cotton Mills, of Stonewall, Miss., expects to add 5000 spindles to its new 10,000-spindle mill. Mr. T. L. Wainwright, secretary and superintendent of the company, is now East on a trip connected with this addition, and will return shortly and make public further particulars regarding the improvements. A statement as to the cost, size, capacity, etc., of the addition will be made later.

Textile Notes.

The Park Woolen Mills, of Rossville, Ga., did contemplate making some additions this year, but has decided not to make any improvements until probably next season.

There is talk of the establishment of a bleachery in Columbia, S. C. It is said that parties have the intention of leasing a certain building from Mr. W. H. Lyles to utilize for the new enterprise.

The Henrietta Cotton Mills, of Washington, La., will resume operations soon, after having been idle for several years. The company will start with fifty hands, running 3000 spindles and using 12,000 pounds of cotton weekly.

The first round cylindrical cotton bale ever put out in Caldwell county, Texas, was turned out at Lockhart last week from the machine of Mr. J. O. Lipscomb. The machinery works well and the bales were neat, solid and compact.

Mr. Frank Von Borries, who has been visiting the textile schools in the East as a representative of the mercantile and manufacturers' committee of the Commercial Club of Louisville, will make a report favoring the establishment of a textile school in Louisville.

The Abbeville Cotton Mills, of Abbeville, S. C., will put in thirty-two additional looms thirty-six inches wide. The present number of looms is 304, and the new ones will increase the plant's capacity about 10 per cent. Other machinery may also be installed in the fall.

The citizens of Bennettsville, S. C., have started a movement for the erection of a cotton factory. A public meeting has been held and a stock company proposed, for which subscriptions are now being solicited. Among those interested are D. D. McColl, C. M. Weatherly, P. L. Breen, M. A. J. Moore and others.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., August 16.

Trade is dull with regard to cotton oil, and with the lard market in its present depressed condition there is little room for immediate improvement. Owing to the continued weakness of the latter, the chief outlet for cotton oil is shut off. Similar conditions prevail with regard to tallow. The export list for the last three weeks shows a heavy business in tallow and greases generally, much of which will doubtless be substituted for cotton oil as a soap-making ingredient. The closing price for lard, October delivery, Chicago, is 5.35 cents. Tallow rules in New York at 3½ cents. Stagnation prevails in cotton oil, and it cannot be denied holders who all along have been firm in their views, declining to entertain propositions based on concessions from prices current, are somewhat anxious as to the future. The market is therefore weaker as a consequence, but the least show of activity would undoubtedly bring prices to a firm basis. The near approach of new oil and the unexpected slowness of demand conjointly contribute to the present weakness. At 23½ cents during the earlier part of the week summer yellow found an outlet to an appreciable extent, but at this writing the attendance in the cotton-oil corner is very small and quotations are nominal. Receipts are light, 1450 barrels, including through shipments, while exports for the week aggregate 3500 barrels, half of which is destined for Marseilles. From Louisville the announcement is made 15½ cents is offered for crude, September delivery, and new crude, Texas, 15 cents, October. Reports arriving from various parts of the South are to the effect that the new seed crop will be heavy. It is, however, difficult to form a reliable estimate of the future of cotton oil, so complex are the conditions which now prevail. What with the prospect of worms destroying part of the Texas crop, the reported outbreak of yellow fever in Louisiana and other drawbacks, the outlook appears doubtful. Nevertheless, the fact remains that with the cessation of war and the opening up of the West India Islands for trade a spurt in the provision and compound-lard market will inevitably follow. The future of cotton oil doubtless depends upon lard, and the general revival of business is more than probable. The following are closing prices: Crude, 19 cents; crude, loose f. o. b. mills, 16 cents, nominal; summer yellow, prime, 23¼ to 24 cents; summer, off grades, nominal; yellow, butter grades, 28 to 30 cents; white, 28 cents; winter yellow, 29 cents, and salad oil, 29 to 30 cents. Liverpool cotton oil has advanced to 16/.

There is nothing new to report concerning cake and meal, and until new-crop goods appear the market will be a waiting one with regard to the demand from both sides of the Atlantic.

Cottonseed-Oil Notes.

The cottonseed-oil mill which is being erected at Chester, S. C., by Mr. T. J. Martin will be completed by September 15. The mill will have a capacity of grinding forty tons of seed per day.

The Hill City Oil Co. was incorporated at Vicksburg, Miss., on the 11th inst. The capital stock is placed at \$50,000. The mill will be ready for operation by the 1st of December, and will be one of

the largest oil mills in the South. A site of six acres has been secured on the river bank beyond the city limits, and the work of construction will commence immediately. The incorporators are Capt. E. C. Carroll, Eugene Martin and Thomas M. Smedes.

There is more activity in the market for cottonseed products in New Orleans on the approach of the crushing season. The mills in this section are generally ready for the opening of the new season, and indications point to considerable activity in cottonseed oil and other products. Prices are now generally steady, with a moderate offering of the old crop. Cottonseed, \$5 per ton (2000 pounds) on the river bank from New Orleans to Memphis; cottonseed meal jobbing at depot, \$17.50 to \$17.75 per short ton and \$18.50 to \$18.75 per long ton for export f. o. b.; cottonseed oil, 17 to 17½ cents per gallon for strictly prime crude; in bulk, 15 to 15½ cents, and 22 cents for refined oil at wholesale or for shipment; oilcake, \$19.25 to \$19.50 per long ton f. o. b.; linters—A, 3 cents per pound; B, 2½ cents; C, 2¼ cents; hulls delivered at 7½ to 10 cents per 100 pounds, according to the location of the mills.

GENERAL NOTES.

Brief Mention of Various Matters of Current Interest.

It is thought that the battleship Illinois will be launched at Newport News about September 20.

The Maryland Steel Co., at Sparrow's Point, has decided to place the marine department of the works again in operation.

The first shipment of brown ore from the Nelly Castleman mines of the Sloss Iron & Steel Co., in Leeds, Ala., has been received at Birmingham.

The contract for dredging the channel from the sea to the Portsmouth navy-yard has been awarded to the American Dredging Co., of Philadelphia.

In the past year about 12,000 barrels of American dried apples have been received by the merchants of Nantes, France. The apples are used in making sugar.

Mr. Theodore C. Search, president of the National Association of Manufacturers of the United States, has made a trip abroad, and as a result of his observations will recommend at the next meeting of the association the establishment at Hamburg of an American warehouse similar to that recently opened at Caracas, Venezuela.

The fruit, flour and vegetable festival of Houston, of which Secretary Tom Richardson, of the Houston Business League, has been such an earnest and successful advocate, will be repeated this winter. An organization for that purpose has been effected, with Mr. W. H. Childress, president; Tom Richardson, secretary, and T. W. House, treasurer. The festival has been an effective means of calling attention to the advantages of Houston and the tributary coast.

Literary Notes.

Edward Marshall, the correspondent who dictated his account of the Rough Riders' fight after the surgeon told him he was mortally wounded, has written his recollections of that day, while slowly convalescing in a New York hospital. It will appear in the September Scribner's under the title, "A Wounded Correspondent's Recollections of Guasimas."

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record, Baltimore, Md., August 18.

In the local phosphate market business still continues quiet, although there has been more inquiry during the week from out-of-town manufacturers. Sales of Tennessee phosphate rock are reported at outside figures. The market in South Carolina is very steady, with a good domestic and slightly better foreign inquiry. Values of phosphate rock in Charleston, S. C., have not materially changed during the present month, and crude is quoted at \$3 at the mines, hot-air-dried \$3.25 f. o. b. vessel in Ashley river and \$3.45 f. o. b. city. Ground rock in bulk is quoted at \$5.50 f. o. b. vessel at city. In the Florida phosphate field the mining of rock is being pushed with considerable vigor, and both land and pebble miners are very busy. Shipments from the ports for the current month will likely be as large as last. In the Tennessee phosphate field everything is activity around Mt. Pleasant, and values are firm and a shade higher. Both the domestic and foreign inquiry is good for Tennessee rock, and stocks are not allowed to accumulate. Among the charters reported in New York last week were the following: A British ship, 1644 tons, from Port Royal to Yokohama with phosphate rock at 31/3; British steamer Karoon, 1343 tons, from the South to the United Kingdom or Continent with phosphate rock on private terms; British brig Clyde, 236 tons, from Conetable Island to New York with phosphate rock on private terms, and schooner Sadie Willcutt, 347 tons, from Newport News to New York with phosphate rock on private terms.

Fertilizer Ingredients.

The market for ammoniates is quiet at Eastern centers. There has been a heavy demand for blood for export, sales amounting to 2000 to 2500 tons. Prices at Western producing centers have advanced to \$1.75 per unit f. o. b., basis Chicago freight. Nitrate of soda is quiet and steady. Sulphate of ammonia is firm.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)	\$2 50 @	—
Nitrate of soda	1 85 @	—
Blood	1 85 @	—
Hoof meal	1 70 @	—
Azotine (beef)	1 80 @	—
Azotine (pork)	1 80 @	—
Tankage (concentrated)	1 65 @	—
Tankage (B and 20)	1 70 @	10
Tankage (7 and 30)	17 00 @	17 50
Fish (dry)	20 00 @	—
Fish (acid)	12 00 @	—

Phosphate and Fertilizer Notes.

It is stated that the farmers of Virginia will this year use more fertilizer than in any preceding year in the history of the industry in that State. The total amount which will be used will, it is thought, reach at least 225,000 tons, against 200,000 tons last year. The increased acreage, with higher prices for grain and tobacco, has caused an increased demand for fertilizers.

The Virginia & Carolina Chemical Co., of Richmond, Va., has purchased the mills of the Southern Fertilizer Co. for \$750,000. The four mills controlled by the Southern Company are at Atlanta, Savannah, Rome and Cordele, Ga. The purchase of these mills makes the total number of factories controlled by the Virginia & Carolina Company twenty-seven. The company is capitalized at \$7,000,000.

The domestic shipments of phosphate rock from Charleston, S. C., for the week ending August 12 were as follows: Schooner Senator Sullivan for Cartaret, N. J., 1100 tons; schooner Henry Lippett

for Baltimore with 1350 tons acid phosphate, and schooner Annie R. Grace for Richmond, Va., with 761 tons of rock. The total shipments from September 1, 1897, to August 12 amounted to 91,832 tons, against 89,819 tons last year.

The New South.

Under the caption "The New South," the Vindicator-News, of Franklin, La., in republishing some statistics of Southern progress from a pamphlet "Facts About the South," by the editor of the Manufacturers' Record, says:

"Notwithstanding the shrieks of that school of politicians who invoke the curse of heaven against the crime of 1873, the revenue from capital in the South, invested in farm operations, yielded in 1890 24.1 per cent., as against 13.1 per cent. in all other sections of the country. Says The Sun: 'Mr. Edmonds estimates the present value of the South's agricultural products at \$930,000,000, and this is greater by \$150,000,000 annually than in 1890.'

"It is a notorious fact that pig iron is made in Alabama cheaper than anywhere in the world, and that the cotton mills of the Carolinas and Georgia are pushing the New England mills to the wall.

"In peace, we are rivals of our Northern brethren in branches of industry where they were formerly established, both by tariff and adaptability, and in war the old hero, Dewey, finds his counterpart in the young hero, Hobson.

"But the mourner goeth about the streets as if the South were dead. A favorite funeral sermon is from the text that 'by five-cent cotton a man cannot live,' and another gloomy and sepulchral one is, 'unless we have 16 to 1 surely the evil man will triumph, and the righteous wither and fade away.'

"If cotton failed to pay at five cents, it is inconceivable that a country can grow rich by raising it. But the figures show that the South is advancing agriculturally, and therefore there must be a mistake somewhere. It is forgotten that the by-product of cotton, the seed, yields \$120,000,000 per annum; it is forgotten that five-cent cotton will exchange for more of product necessary and useful to man than at any former period; it is forgotten that the Southern farmer is beginning to raise more home supplies, decreasing the old-time draughts on the fund derived from an exclusive crop of cotton.

"But the South 'do move.' Her cities are growing in wealth and population; her farms are being multiplied and improved; her factories are being increased and enlarged; her mills are being more and more developed, and her forests yet await the saw's incessant buzz to swell her accumulated and accumulating stores.

"Let the mourner cease from mourning, and the shrieker from shrieking. They will not cease because they are few, but because they are unheeded.

"No more can the crank and the demagogue make us believe that the South is in the slough of despond than could the bull of the Pope make Galileo believe that the earth stood still."

Hon. Ferdinand W. Peck, commissioner-general of the United States to the Paris Exposition of 1900, has prepared literature covering the rules and regulations and classifications for the use of the exhibitors. He comments upon the unsurpassed opportunities which this exposition will offer American exhibitors to develop their foreign trade.

The firm of Harbison & Gathright, of Louisville, Ky., have been awarded a contract for \$30,000 worth of officers' saddles for the United States army.

MECHANICAL.

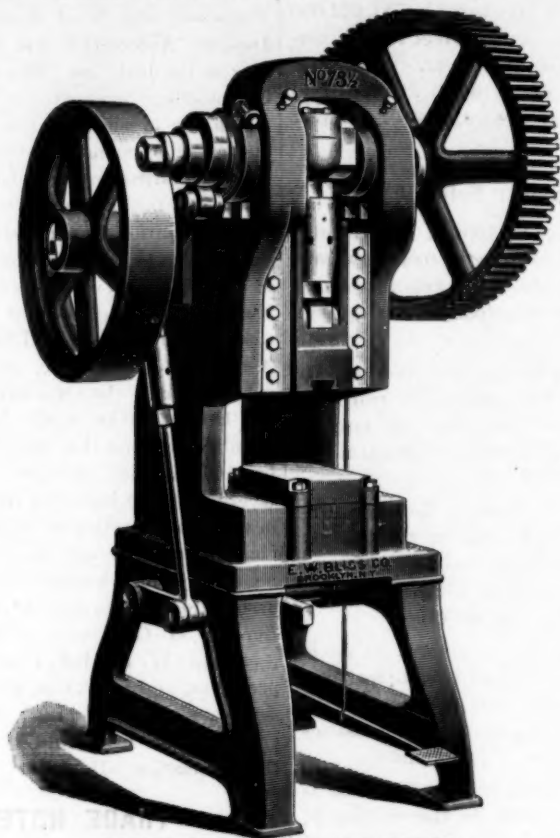
"Bliss" Special Power Press.

The illustration shows an improved press built by the E. W. Bliss Co., 137 Plymouth street, Brooklyn, N. Y., which is especially adapted for a very wide range of work. It is built with an overhanging frame, as shown, or with a straight-sided frame, either with fly-wheel or geared. It is specially designed for

ute is furnished. The weight is 6725 pounds.

This type of press is built in several sizes, and the dimensions of each respective size may be modified somewhat to suit special requirements.

Further particulars may be had by addressing the manufacturer as above, which builds a large variety of presses, dies, shears, drop hammers and special machinery particularly adapted for sheet-metal work.



"BLISS" SPECIAL POWER PRESS.

trimming drop forgings, either hot or cold, but is equally well suited for punching, piercing, shaping or stamping heavy blanks in the manufacture of electrical instruments, sewing machines, typewriters, cash registers, cutlery, hinges, skates and many bicycle parts, such as sprockets, hubs, flanges and all styles of sheet-metal connections.

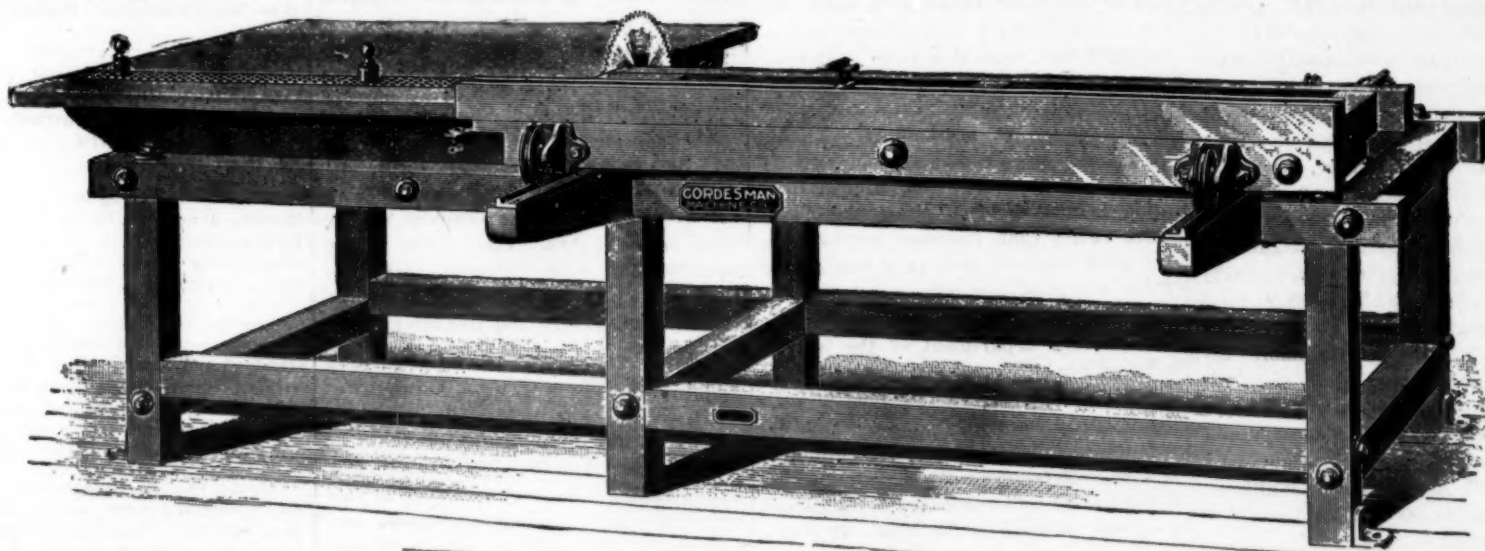
The press shown is made with a $4\frac{1}{2}$ -inch stroke, with six inches distance back from center of slide, eight inches from

Box-Board Cut-Off Saw.

This style of cut-off saw is very popular in box factories for cutting off to lengths. The frame is well made and has its joints mortised, tenoned and drawn-bolted.

The mandrel revolves in connected bearings and is provided with automatic expansion device, so saws with different size holes can be used.

The table is mounted on rollers of large



BOX-BOARD CUT-OFF SAW.

bed to slide when down and adjustment up, 5x8-inch opening in bed and $2\frac{1}{2}$ -inch cam-actuated knockout movement, so arranged that it can be timed to suit any case by adjusting the cam around the shaft. In addition to the "Bliss" automatic clutch on the main shaft, it has a friction clutch on the back shaft, operated by a hand lever, not shown, so that the slide can be stopped at any point of the stroke. A countershaft to run the press at twenty-eight to forty strokes per min-

diameter and is moved with very little exertion. The roller table is furnished with a fence with adjustable stop, so short stock can be cut. The large stationary table is fitted with a plate and has holes drilled in it so stops to regulate the lengths of the material can be placed in them. These holes are so situated that lengths can be cut off to eighths of an inch. The stops have a collar for board to rub against, reducing the friction.

The countershaft has tight and loose

pulleys, 10x5 $\frac{1}{2}$ inches, and should make 700 revolutions per minute. Address the Cordesman Machine Co., Butler street, Cincinnati, Ohio.

Iron-Body Angle Blow-Off Valves.

Lunkenhimer's iron body blow-off valves are of heavy pattern, well made in every particular, and guaranteed for working pressures up to 250 pounds to the square inch. All parts are made of iron, excepting the stem, disc-locknut, disc-plug and seat ring, which are made of bronze, while the reversible bearing



FIG. 1.—IRON-BODY BLOW-OFF VALVE.

faces in the iron disc are filled with Babbitt metal.

Reference to the sectional illustration will show that the disc is solid and fits closely in the barrel of the valve shell, so as to prevent scale and sediment from becoming entrapped on top of disc, thereby preventing it from being readily raised when necessary. The disc is reversible, having two valve or seating faces which can be changed at will, thereby increasing the durability and efficiency of the valve considerably. These valve or seating faces in the disc consist of dovetail slots, which are filled with Babbitt metal, and when both are cut or worn out the old Babbitt can be melted out and new

can be reversed so as to present a perfect bearing face to the seat ring in the shell of valve.

Attention is called to the heavy design of these valves. All valves are carefully made of the best materials, and are thoroughly tested in every particular; all parts are made to gauges and are interchangeable, so that any broken or worn-out piece can be renewed.

They are made in three sizes, two, two and one-half and three inches, with screw, flange or screw and flange ends.

The valves can also be furnished made

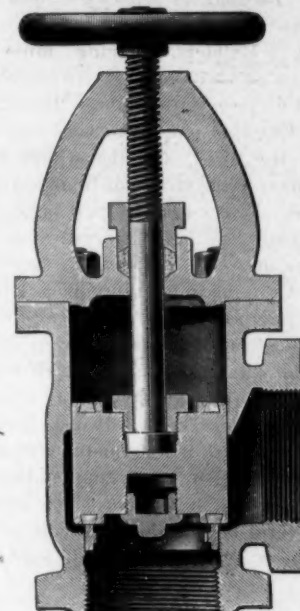


FIG. 2.—SECTIONAL VIEW.

entirely of bronze for marine purposes. Prices sent upon application to the maker, the Lunkenhimer Company, of Cincinnati, Ohio.

Stock in the South.

Mr. M. V. Richards, the land and industrial agent of the Southern Railway, Washington, D. C., has issued a broadside calling attention to the advantages of the South for stock-raising. He estimates that there are in Virginia, North Carolina, South Carolina, Georgia, Tennessee, Alabama, Mississippi, Florida and Kentucky 1,313,000 farms, and contends that if every farmer would add a cow, a sheep and a hog each year to his stock he would find in a very few years a mar-

velous growth of his available assets. The increase the first year would be nearly 4,000,000 animals, worth at a low estimate \$20,000,000. The subject, he says, is also commanding a great deal of attention in the South, and good results are being shown in many localities, but there is more room and opportunity for a great deal more to be done in this direction, and now is the time to do it. All who engage in stock-raising will find it a paying investment.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., August 18.

The tone of trade in the local lumber market still continues dull, and the demand is generally very limited in character. Boxmakers report business good, and have been in the market making purchases. Builders, planing mills and yardmen are buying very sparingly, and only to fill immediate wants. Receipts of North Carolina pine have been moderate during the week, and the wharves and docks have large stocks of lumber yet untouched. Prices for air-dried lumber are very steady now, and holders are not disposed to make concessions. In kiln-dried North Carolina pine there is a slightly better inquiry, both from local, out-of-town dealers and for foreign trade. Stocks of kiln-dried lumber at all milling sections are fully ample for any prospective demand. The hardwood business rules quiet, with a light inquiry from all sources. Shippers are not sending off much material, but reports are current that several large shipments will go forward this week to the United Kingdom.

Savannah.

[From our own Correspondent.]

Savannah, Ga., August 15.

The tone of the local lumber market has ruled quiet during the past week, and trade in nearly all lines of the lumber industry has been light. Shipments were much lighter than usual, while the demand from the regular sources has fallen off considerably. Since the declaration of peace lumbermen are figuring on some trade with the West Indies, and as soon as matters are settled in Cuba and Porto Rico it is thought that considerable trade in lumber will materialize at those points. The outlook is brighter at Brunswick for a renewal of trade in lumber with Spanish ports direct, and indications point to a larger foreign export trade from Brunswick and Darien. The market on Saturday closed steady, with prices as follows: Minimum yard sizes, \$11; car sills, \$11.50; difficult sizes, \$12.50 to \$14; ship stock, \$16.50 to \$18; sawn crossties, \$9.50 to \$10; hewn crossties, 33 cents per tie, all f. o. b. During the week 360,000 feet of lumber were shipped to New York, 380,000 feet to Baltimore, and the schooner George Taulane, Jr., for Chester and Philadelphia with 351,402 feet of pitch-pine lumber. Lumber freights are firm. The rates from this and nearby ports in Georgia are \$4.50 to \$5.50 for a range including Baltimore and Portland, Me. Steamer rates to Baltimore are quoted at \$6, to Boston \$7.75 and New York \$7. The charters reported in New York last week were a German bark, 696 tons, from Brunswick to Paysander with lumber at \$16, and schooner Waltham, 149 tons, from St. Simons to New York or Sound on private terms.

Mobile.

[From our own Correspondent.]

Mobile, Ala., August 15.

Indications point to greater activity in the timber and lumber market of this port, and already there is considerable speculation as to the future trade with the newly-acquired territory in the West Indies. The season so far has been very quiet; timber shippers have been doing but little business, and stocks of both hewn and sawn timber are very light. There is at the moment a better tone to the European timber market, and prices

are firmer. In the local market values are much firmer, and sawn timber, when placed upon the market, will bring 10 to 10½ cents per cubic foot, 40-foot basis. Cypress is in good demand at 6 to 9 cents per cubic foot, according to average. There is a fair demand for saw logs at \$4 to \$6 per 1000 feet. There is a good demand for hewn timber, which is quoted 11 to 12 cents per cubic foot, basis 100 cubic feet, average B1 good. Hewn oak and poplar are dull, with little or no demand. The lumber trade is looking up, and mills in this section are generally all busy. A good demand is expected from Cuba and Porto Rico when matters are adjusted in those islands, and it is thought that Mobile will again enjoy that very extensive lumber trade with Cuba which existed previous to the war with Spain. There is a schooner now in port loading for Cuba, and she will leave in a few days. It is stated that the Mobile & Ohio Railroad is prepared to take advantage of the trade with Cuba and Porto Rico, and will have steamer connections with those islands. It is also said that a steamship company has made a proposition to lumbermen and others here which it is thought they will accept, and bi-monthly trips will be made to Cuba. During the past week the following shipments were reported: Steamer Cayo Blanco for London with 17,646 feet of lumber and 65,447 cubic feet of sawn timber; steamer Selma for West Hartlepool with 396,491 feet of lumber and 194,948 cubic feet of sawn timber, and steamer Garonne for Tampico, Mexico, with 144,625 feet of lumber. The total shipments of lumber from this port since September 1, 1897, amount to 50,237,620 feet, against 68,396,508 feet last year. Lumber freights are steady, with rates to the West Indies at \$7 to \$9 in American gold; Mexico, \$8 to \$10; Rio de Janeiro, \$16; River Platte, \$13.50, and coastwise, \$6 to \$7. Timber and lumber by steamer to United Kingdom or Continent, £5 15s. 6d. per standard; sail, 33/ per load for hewn timber, and sawn per standard, £5 2s. 6d. Among the charters reported in New York last week were the following: Italian bark Laura B., 647 tons, from Mobile to Buenos Ayres with lumber at \$16.25, \$2 form; Austrian steamer Aquilega, 1743 tons, from Pensacola to Trieste or Venice with sawn timber at 132/6, and British steamer Dunottor, 2274 tons, from Pensacola to Barrow with sawn timber at 110/.

St. Louis.

[From our own Correspondent.]

St. Louis, Mo., August 15.

The volume of business last week was much better than for some weeks past, and stock has been moving in larger lots. There is a good general demand reported for all kinds of lumber, and dealers in nearly every department of the lumber industry are very much encouraged by the promising outlook. Yellow pine is very firm, with a hardening tendency to values, and as to the demand the situation is very satisfactory. Stocks at all milling points are not excessive, and mills are generally working on full time. Receipts of cottonwood are very liberal, and the market is steady, with stocks well sold up. In hardwoods generally the situation is unchanged, and there is considerable stock moving, orders during the past week being quite numerous. Those engaged in the trade look for a very heavy fall business, and already there are a number of representatives of implement, wagon, farm machinery, carriage and furniture people in the market looking out for special lots of material. There is a steady demand for oak in quartered white, and for thick plain white. Some fair sales of red oak are reported. Ash

is in fair demand, and thick stock is wanted. Other woods have not changed, and are generally steady, with moderate inquiry. The report of the Lumbermen's Exchange for the week ending August 6 shows the following movement of stock, exclusive of the white-pine receipts from the upper Mississippi river: Receipts for the week, 21,437,000 feet, against 14,095,000 feet last year; shipments, 11,700,000 feet, against 8,952,000 last year. From January 1, 1898, to August 6 the receipts of lumber amounted to 581,132,000 feet, against 437,618,000 feet for the corresponding week last year. The shipments for the same period amounted to 307,692,000 feet, against 263,892,000 feet last year.

Lumber Notes.

Messrs. Bang & Daniel, of Atlanta, Ga., are about to operate their saw mill at Montezuma, Ga. The firm intends to cut oak timber principally for shipment to Europe.

During the seven months ending July 31, 1898, there were shipped by rail from Orange, Texas, 4944 cars of lumber, against 3505 cars for the corresponding period in 1897.

The British steamship Lesbury was cleared from Pensacola on the 9th for London with 1,326,000 feet of timber and 478,000 feet of lumber, valued at \$18,750, by the Pensacola Lumber Co.

The steamship Carib cleared at Jacksonville, Fla., on the 10th inst. for New York. She carried out 200,000 feet of lumber, 90,000 shingles, 2200 crossties and other packages of merchandise.

The J. G. Powell saw mill, which is one of the finest mills in the vicinity of Lake Charles, La., is putting in a new dry-kiln 30x150 feet, and will be run under the new process of steam for seasoning lumber instead of the old furnace.

The receipts of building material at New Orleans for the week ending August 12 were as follows: Lumber 1,879,000 feet, shingles 175,000, oak staves 240,630 and cypress staves 19,000. Receipts of lumber from August 1 to 12 amounted to 3,114,500 feet.

It is stated that efforts are being made, and with every indication of success, to induce Eastern capitalists to establish two large factories in Moorhead, Ky. A hub and spoke factory is almost assured, and a furniture factory will likely be built during the year.

The Fairmon Lumber & Shingle Co. was incorporated at Little Rock last week. The capital stock is placed at \$5000, and the place of business will be near Baucam, Ark. The officers of the company are Seth Fairmon, president; Dell Fairmon, vice-president, and George Niemeyer, secretary and treasurer.

O. A. Knauff, foreman of the planing mill of the Wilson Cypress Co., of Palatka, Fla., was in Jacksonville last week for the purpose of removing the plant of the Michigan Lumber Co. and shipping it to Palatka. The plant consists of two eight-horse-power boilers, an engine, dry-kiln and a full set of planing-mill machinery.

The Reliance Lumber Co., of Beaumont, Texas, recently cut a stick of long-leaf yellow pine 28x28 inches, thirty-two feet long. It was sawed into six-foot sticks, out of which were cut five sticks of timber measuring 8x16 inches in the clear, besides a number of planks. In all the log cut 1000 feet. It was cut from the forest at Silsby, on the Gulf, Beaumont & Kansas City Railroad, north of Beaumont.

As a result of the recent heavy rains in Kentucky and Tennessee, the largest tide

since 1890 is now sweeping down the north fork of the Kentucky river. Thousands of logs and staves are drifting away, and will be a total loss to owners. The Cumberland river is at the highest stage of water ever known at this season, and thousands of logs are coming in at Williamsburg, Ky., to the saw mills. The Southern Lumber Co., of Valley View, Ky., has large quantities of logs coming out on this rise.

The semi-annual meeting of the West Tennessee and West Kentucky Lumber Dealers' Association was held in Memphis on the 10th inst. The minutes of the last meeting were read and adopted, after which the president called for addresses and paper by members of the association. The committee on legislation reported, and asked for further time. The subject of consolidation was introduced and fully discussed, the result being the adoption of the following resolution: "Resolved, That it being the sense of this organization to join the Illinois Lumber Dealers' Association as a whole, or in such manner as may be mutually beneficial, we hereby make application for such membership, and that we elect a delegate by ballot, such delegate to attend a meeting of the board of directors of the next annual meeting of said Illinois association, to carry out the above, the expense of such delegate to be paid by the association." The officers of the association are O. C. Barton, of Paris, Tenn., president; W. K. Hall, Fulton, Ky., vice-president, and H. P. Coe, Jackson, Tenn., secretary and treasurer. Memphis was chosen as the next place of meeting, and the association adjourned.

TRADE NOTES.

Knitting Mill for Rent.—A complete modern knitting mill is being offered for rent by Reverdy Stewart, of Newport News, Va.

Ball Engines Again.—The Pine Bluff (Ark.) Cotton Oil Co. has ordered an engine for electrical purposes from the Ball Engine Co., of Erie, Pa.

Ball Engines.—The engines for the new electric plant in St. Agnes's Hospital, Philadelphia, Pa., will be built by the Ball Engine Co., of Erie, Pa.

Bridge Contracts Secured.—Contract has been awarded to the Jasper Construction Co., of Jasper, Ala., for the construction of three steel bridges in Walker county, Alabama.

Steam Fans.—Four second-hand Sturtevant exhaust fans, combined with upright engine, are offered for sale at a bargain price by the Doubleday-Hill Electric Co., of Pittsburg, Pa. (See adv.)

Cotton and Dyeing Machinery Offered.—Messrs. James N. Williamson & Sons, of Elon College, N. C., are offering for sale second-hand cotton machinery and cotton-dyeing machinery. (See adv.)

Railway Equipment.—The Tuskee Railroad has completed changing its gauge to standard and purchased all the locomotives, passenger and freight equipments from the Southern Iron & Equipment Co., of Atlanta, Ga., which concern has bought all the narrow-gauge equipment of the road.

General Electric Enlarging.—Contract has been awarded for the erection of a machine-shop addition to the General Electric Co.'s works at Schenectady, N. Y. The new building will have total floor space of 144,250 square feet. Several important extensions are also being made to the company's plant.

Australian Government Order for General Electric.—The government of Victoria has ordered from the General Electric Co. six Thomson recording watt meters of 100 volts and varying capacities, to be deposited in the electrical bureau of the home office, and will be used as the official standards by which all electricity meters used in the colony will be tested. In future no meters measuring electrical energy will be allowed to go into service in Victoria unless they agree with those just ordered and receive the final sanction of the Victoria government.

THE M
seek
ported in
ment by
complete
one inter
possible t
must be pr
as news.
ments are
or "repor
items of
note these
necessity
they will
tainty m
state are
We are
attention
may occur

*Means n
are wanted
found under
In corres
ported in th
to all conce
mation was
Record.

It often o
new compar
the postman
to the comp
known." 2
ports the fir
and our rea
munication
ful in decid
even then
some letter
edge on the
companies.
Invited, as
guard again

Bessemer-
of Birmingham
the manufa
chinery has

Ensley—In
\$150,000 in
once. The
Co. is said t

Baucam—
Fairmon L
Incorporated
Dell Fairm
Niemeyer,
stock \$5000

Little Roc
lean Telegr
Incorporated
Little Rock
phone.

Sanford—S
build his s
cently.

St. Mark
Florida Fib
factory.

Tallahassee
council has
taken imme
an electric
Mayor."

Albany—C
The erection
dry is conte
son & Co.*

Arlington-
Plant.—The
termine the
tion of an e
tion of a sy
"The Mayor
Brunswick
The Brunsw
facturing C
will rebuild

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with every one interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Bessemer-Bottling Works.—C. S. Davis, of Birmingham, has established a plant for the manufacture of soda water, etc.; machinery has all been purchased.

Ensley-Iron Foundry.—It is stated that a \$150,000 iron foundry will be erected at once. The Tennessee Coal, Iron & Railroad Co. is said to be interested in the enterprise.

ARKANSAS.

Baucum-Lumber and Shingle Mills.—The Fairmon Lumber & Shingle Co. has been incorporated, with Seth Fairmon, president; Dell Fairmon, vice-president, and George Neimeyer, secretary and treasurer; capital stock \$5000.

Little Rock-Telephone Lines.—The American Telegraph & Telephone Co. has been incorporated, its purpose being to connect Little Rock and Memphis, Tenn., by telephone.

FLORIDA.

Sanford-Saw Mill.—Charles Tufts will rebuild his saw mill which was burned recently.

St. Marks-Fiber Factory.—The West Florida Fiber Co. is erecting a palmetto-fiber factory.

Tallahassee-Electric-light Plant.—The city council has passed a resolution that steps be taken immediately for the establishment of an electric-light plant. Address "The Mayor."

GEORGIA.

Albany-Canning Factory and Laundry.—The erection of a canning factory and laundry is contemplated. Address W. A. Johnson & Co.*

Arlington-Water-works and Electric-light Plant.—The city will hold an election to determine the issuance of bonds for the erection of an electric-light plant and construction of a system of water works. Address "The Mayor."

Brunswick-Foundry and Machine Shops.—The Brunswick Foundry, Machine & Manufacturing Co., R. E. Briesenick, manager, will rebuild at once its burned plant.*

Columbus-Cotton Mills.—The directors of the Eagle & Phoenix Mills authorize \$50,000 for machinery and other improvements.

Dawson County-Gold Mines.—The Barrett Mining Co. (reported last week under Chattanooga, Tenn., as incorporated) is composed of Ohio parties, who have purchased and will develop gold mines in Dawson county. For further information address J. W. Adams, Room 6, Adams Block, Chattanooga, Tenn.

Dunn-Bauxite Mines.—K. A. Rogers has discovered deposits of bauxite near Dunn and proposes the organization of a stock company to develop the property.

Greensboro-Water Works.—The city voted on August 9 to issue \$22,000 in bonds for the construction of water works. Address J. B. Williams, mayor, for further information.

La Grange-Cotton Mill.—The Dixie Cotton Mills (mentioned last week) will add a 5000-spindle equipment to its mill; machinery has all been purchased; O. A. Dunson, president and general manager.

Milner-Back-band Factory.—The Iversen & Sterne Manufacturing Co. will increase the capacity of its plant.

Montezuma-Saw Mill, Timber Lands, etc. H. Daniels & Co., of Atlanta, have purchased 2000 acres of hardwood timber lands and will erect a saw mill of 20,000 feet daily capacity near Travelers' Rest.

Montezuma-Telephone System.—Jule Felton and Mrs. C. H. Maxwell have incorporated the Montezuma Telephone Co., with a capital stock of \$1000, for the construction of a telephone exchange. Address Jule Felton.

Rome-Water-works Improvement.—A committee has been appointed to advertise for bids and specifications for the proposed filter for the Rome water works. Address J. W. Rounsaville, chairman committee.*

Rossville-Cotton Mills.—The Park Woolen Mills will not make any additions to its mill at present, but may do so next year.

KENTUCKY.

Brandenburg-Stone Quarries.—The American Lithographic Stone Co. has been incorporated for the purpose of developing a quarry of lithographic stone near Brandenburg.

Bowling Green-Crate Company.—The Kentucky Folding Crate Co. has been incorporated, with a capital stock of \$3000, by W. W. Hendricks, James H. Moore and L. C. Johnson.

Cloverport-Fan-mill Plant.—Mr. Heyser is negotiating for an engine to furnish motor-power to run the machinery with which he will equip his fan-mill plant. Address Mr. Heyser, at the Heyser House.

Louisville-Medicine Factory.—B. L. Harris, of Indianapolis, Ind., will erect a plant in Louisville for the manufacture of his patent horse food, as lately reported. The plant will have a daily capacity of twenty tons. Address Mr. Harris at the Waverly Hotel, Louisville.

Vine Grove-Telephone Company.—T. C. Vanmeter, David Prewitt and S. D. Goff have incorporated the Winchester & Lexington Telephone Co., with a capital stock of \$1500.

LOUISIANA.

Lake Charles-Dry-kiln.—A new dry-kiln 30x150 feet is being put in at the J. G. Powell mill.

Natchitoches-Bridge.—An iron bridge will be constructed across Johnson Chute, bids for which are invited. Address George W. Kile, president police jury, Natchitoches.*

New Orleans-Filter Factory.—J. D. Capron, James A. Ware, Thomas Beary, John D. Shaffer, James M. McBride, Thomas Supple and others have incorporated the Capron Rotary Filter Co., Limited, with a capital stock of \$50,000, for the purpose of manufacturing, operating, selling or otherwise disposing of the Capron rotary filter, used for filtering water, cane juice or other liquors. Address J. D. Capron.

St. James-Sugar Mill.—The Onelda Planting & Manufacturing Co. is putting in a seven-foot six-roller mill, a new vacuum pan and centrifugals, besides making extensive improvements.

MARYLAND.

Baltimore-Evaporating Plant.—A. F. Spawm, of Tacoma, Wash., who has been investigating with a view of establishing

an evaporating plant in Maryland, has decided to locate same near Electric Park.

Baltimore-Real Estate.—Incorporated: Baltimore Home Builders' Co., by William O. Oursler, William I. McKean, Thomas S. Hodson, Ira O. Oursler and William H. Clowney, for transactions in real estate. The capital stock is \$5000.

Boonsboro-Water Works.—The Boonsboro Water Works Co. is preparing for the construction of a system of water works. Address Howard G. Frederick, president, for further information.

Cambridge-Flour Mill.—Hastings Bros. will erect a patent roller-process flour mill; building will be 40x60 feet front and 34x60 feet rear; boiler-room will be 16x30 feet, and the mill will have a daily capacity of thirty-four to forty barrels of flour.

Centreville-Ice and Basket Factory.—Jno. Brierly, of Roberts, Md., is investigating with a view of establishing an ice and basket factory in Centreville.

Frederick-Telephone and Telegraph Lines.—Incorporated: The Maryland Telephone & Telegraph Co., with a capital stock of \$30,000, by Col. D. C. Winebrenner, Judge John C. Motter, Hammond Urner, Wilbur H. Duval and Edgar L. Miller, to operate lines in Frederick, Washington, Allegany, Garrett and Montgomery counties, Maryland; Adams and Franklin counties, Pennsylvania, and Loudoun county, Virginia. Edgar L. Miller can be addressed.

Luke (P. O. at Piedmont, W. Va.)-Paper Mill.—The West Virginia Pulp & Paper Co. is erecting a one-story-and-basement brick extension 160x72 feet to its paper mill; all machinery required for this extension has been ordered. Address John G. Luke, vice-president, Mutual Reserve Building, No. 309 Broadway, New York.

Rockwood-Coal Mines.—E. Statler and associates, of Elk Lick, Pa., have purchased 500 acres of coal land near Rockwood and will develop same, using all the latest and improved machinery.

MISSISSIPPI.

Duckhill-Ginning, Compress, etc., Company.—The Duckhill Ginning, Compress & Storehouse Co. has been incorporated by D. D. Wilkins, W. R. Moore, J. H. Turner, J. M. Couger and others, with a capital stock of \$8000.

Lexington-Cotton Compress, etc.—R. E. Wilburn is president, G. W. Stigler, vice-president, and W. H. Durden, secretary and treasurer, of the Lexington Compress & Oil Mill Co., reported last week as organized; site has been secured and contract signed for purchase and erection of cotton compress and storage-room. The cottonseed-oil mill has been postponed until next season. The paid-up capital stock is \$30,000, which will be used for compress only; authorized capital \$60,000. Address the president for further information.*

Stonewall-Cotton Mills.—The Stonewall Cotton Mills anticipates adding in the near future 5000 spindles to its new 10,000-spindle mill.

Vicksburg-Manufacturing, etc., Company.—Freund J. Kneble, O. E. Mayer and associates have incorporated, with a capital stock of \$25,000, the Vicksburg Pants & Manufacturing Co.

Vicksburg-Oil Mill.—E. C. Carroll, Eugene Martin, Thomas M. Smedes and their associates have incorporated the Hill City Oil Co. for the manufacture of cottonseed oil, etc. The capital stock is \$50,000.

MISSOURI.

Granby-Lead and Zinc Mines.—The Mascot Mining & Milling Co., with a paid-up capital of \$8000, has completed and put in operations the latest-improved system of concentrating lead and zinc ores, employing twenty-five men, and having a capacity of 250 tons each twenty-four hours; incorporators, W. H. T. Green, John Blunk, C. H. R. Kugel, H. F. Meadeor and Addie G. Green.

Joplin-Sewerage System.—The city will hold an election for the purpose of increasing the indebtedness of the city to the extent of \$30,000 to extend the sewer outlet and to provide South and East Joplin with sewers. Address "The Mayor."

Kansas City-Sausage Factory.—The Kansas City Sausage Manufacturing Co. has been incorporated, with a capital stock of \$3000, by Martin Keck, Louis Marold and Oscar Marold.

Kansas City-Grain Company.—Chartered: The Frank L. Miller Grain Co., by Frank L. Miller, J. L. Messmore and others, with a capital stock of \$2000.

Sedalla-Coffee-roasting Plant.—Sellers Bros., of the Capital Tea Co., have secured a building and will equip same with plant for roasting coffee on an extensive scale.

St. Louis-Laundry.—The American Steam Laundry Co. has increased its capital stock from \$20,000 to \$25,000.

Webb City-Land and Mining Company.—G. W. Ball, A. G. Carter, C. P. Hendrickson and others have incorporated the Ball Land & Mining Co., with a capital stock of \$16,000.

Webb City-Mining Company.—The Ball Land & Mining Co. has been incorporated, with a capital stock of \$16,000, by G. W. Ball, A. G. Carter, C. P. Hendrickson, W. S. Gunning and others. Address G. W. Ball.

West Plains-Telephone System.—The Mountain Home & West Plains Telephone Co. has been incorporated, with a capital stock of \$5000, to construct a telephone system from Mountain Home to West Plains.

NORTH CAROLINA.

Charlotte-Cannery.—Mr. Kerns, of Long Creek, has established a cannery in Charlotte.

Edenton-Cotton Mills.—The Edenton Cotton Mills has been incorporated by W. D. Pruden, C. S. Vann, J. A. Williams, J. N. Pruden, F. A. White, R. F. Cheshire and others, with a capital stock of \$80,000, for the purpose of erecting a cotton mill.

Gibson-Flour Mill.—The erection of a flour mill with fifteen to forty barrels capacity per day is contemplated. Address J. H. McIlwain.*

Greensboro-Manufacturing Company.—The National Manufacturing Co. has been incorporated, with a capital stock of \$4800, for the purpose of dealing in real estate. The incorporators are E. T. Garsed, Garland Daniel and J. L. York.

Haw River-Corn and Feed Mill.—The erection of a corn mill, with daily capacity of 100 to 125 bushels, and a feed mill for grinding grain for stock is contemplated. Address John A. Trolinger for information.*

Raleigh-Electric-power Plant.—The Raleigh Electric Co. has ordered new machinery to be placed in its electric-power plant.

Rocky Mount-Acetylene-gas Plant.—The establishment of an acetylene-gas plant is contemplated; will put in 600-light machines. Address William T. Gregory for further information.*

Rocky Mount-Cotton Mill.—The Rocky Mount Cotton Mills contemplates putting in an additional water-wheel and a wrought-iron flume to its No. 3 wheel.

Skyco-Ice Factory.—The Consolidated Ice Co. has been incorporated by R. C. Evans, E. R. Daniels, W. S. C. Pugh and W. P. Lemon, with a capital stock of \$5400.

SOUTH CAROLINA.

Abbeville-Cotton Mill.—The Abbeville Cotton Mills has purchased thirty-two additional looms, making 336 in all.

Bennettsville-Cotton Mill.—A \$100,000 stock company will be organized by D. D. McColl, C. S. McColl, C. M. Weatherby, P. L. Breeden, M. A. J. Moore, J. B. Green and T. W. Boucher for the erection of a cotton mill. Address D. D. McColl for information.

Central-Flour Mill.—The Central Roller Mill Co. (reported during the week as organized) has chosen W. G. Gaines president, and R. G. Morgan, secretary and treasurer. The mill will have a daily capacity of fifty barrels, with corn mill and cotton ginery. Address the president for information.

Chester-Cottonseed-oil Mill.—T. J. Martin is erecting a cottonseed-oil mill, with capacity for grinding forty tons of seed per day.

Columbia-Bleachery.—The Agricultural Hall Building will probably be converted into a converting mill or bleachery; W. H. Lyles can be addressed for further information.

Winnsboro-Cotton Mills.—The Fairfield Cotton Mills is putting in 2500 additional spindles.

Spartanburg-College.—A charter has been granted to a commercial and mercantile college with a capital stock of \$5000; incorporators, Miss L. B. Nell and Miss J. F. Hevelo.

TENNESSEE.

Bristol—Machine Shops.—The Dixie Machine and Repair Works has been established by C. W. Umholts & Co.

Chattanooga—Wagon Factory.—The Milburn-Bass Wagon Co. (recently reported) will locate its new plant at East Lake, plans for which have been prepared by Architect Breeding. The main plant will be L shaped; the main frontage will be 500 feet and the L extension 315 feet in length, the width of the building being 100 feet; extending from the L will be dryhouses and stock-rooms, making the entire plant from a quadrangle to 500 feet long and 315 feet wide. The main plant will be of brick and two stories in height.

Clarksville—Tobacco Factory.—J. T. Johnson & Co. have contract to supply lumber for tobacco factory to be built by a Mr. Edwards.

Dayton—Bridge.—The county bridge commissioners will let contract for the construction of a new steel bridge across Little Richland creek, at Allen's Mill.

Knoxville—Clothing Factory.—The Hanna Pants Manufacturing Co. has decided to manufacture coats and vests and will make a large addition to its plant.

Lawrenceburg—Mattress Factory.—R. C. McKim will establish a mattress factory.

Memphis—Mercantile Company.—The Norfleet-Plunkett-Thompson Mercantile Co. has been incorporated with an authorized capital of \$75,000.

Nashville—Shoe Factory.—The Tennessee Shoe Manufacturing Co., of Davidson county, has been incorporated by J. M. Goodbar, William M. Goodbar, William H. Moulton, Griffin Watkins and H. C. Yorks, with a capital stock of \$25,000.

TEXAS.

Beaumont—Shipyards.—Ben Echoff is preparing for the establishment of shipyards on the Neches river.

Dallas—Piano Works.—The Clark Burr Piano Works has been formed and established for the manufacture of pianos. Address Clark Burr, proprietor, No. 174 Elm street.

Fort Worth—Elevator.—Efforts are being made for the erection of a 1,000,000-bushel grain elevator in Tarrant county. For information address the Peterson Bros.

Houston—Clothing Factory.—K. H. Cawthon & Co. have incorporated, with a capital stock of \$10,000, for the purpose of manufacturing men's and children's clothing; incorporators, K. H. Cawthon, C. B. Martin, of Houston, and F. C. Gaffney, of New York. Address K. H. Cawthon.

Houston—Flour Mill.—Edward Hely, of Denison, will establish a flour mill in Houston.

Marlin—Flour Mill.—Efforts are being made for the establishment of a flour mill. For information address Judge L. W. Goodrich, who is said to be interested in the enterprise.

Paris—Mercantile and Drug Company.—The Lone Star Mercantile & Drug Co. has been incorporated, with a capital stock of \$5,000, by C. N. Hampton, I. N. Scott, G. M. Guest and others.

Sabine Pass—Saw Mill and Box Factory.—The erection of a saw mill and box factory is talked of. Judge W. L. Parkinson is said to be interested and can be addressed for information.

Waco—Petroleum Wells.—J. E. Horne and H. T. Staitti have formed a company and are developing petroleum wells near Waco.

Wichita Falls—Water-works and Electric-light Plant.—The city council is negotiating with Charles Carroll, of Sedalia, Mo., relative to taking a franchise to construct a system of water-works and electric-light plant at Wichita Falls.

VIRGINIA.

Buena Vista—Tannery.—Leas & McVitty, of Philadelphia, Pa., have purchased the tannery at Buena Vista (as recently reported) and have incorporated the Blue Ridge Tanning Co., with T. E. McVitty, president, for the purpose of operating same. The tannery is now being remodeled by the addition of a new brick leach and boiler-house, with new boiler. For further information address the president.

Mineral City—Fertilizer Factory.—The Arminius Chemical Co. is increasing its works by the addition of a new and larger crusher, rolls, grading screens, elevators and gigs, which will require increased sized buildings and a general enlargement of the plant, including a new air compressor to run sixteen

drills underground and two new boilers with fixtures. It is also proposed to contract at once for the installation of a new cable with a plant to remove the surface material from the mine, which is estimated to be at least 300,000 tons. It is expected that the new machinery will be in operation about November 1, giving the company a capacity of 100,000 tons of pyrites annually. Address William H. Adams, general manager.*

Norfolk—Sewerage System, Water Works, Electric-light Plant, etc.—John Graham, Jr., engineer and superintendent of the Norfolk Company, in a letter to the Manufacturers' Record, states that his company is making an additional section of its property, known as "Ghent." The company will expend a large sum of money in the improvement of the property; work on the sewerage system is already under way, which will be followed by the introduction of water, gas mains and electric-lighting system, the paving of streets, roadway, curb and footway. The exact amount to be expended has not as yet been determined.

Norfolk—Soap Factory.—Henry Welding will establish soap factory, to replace his factory recently burned at Scottsville; site has been purchased for \$4000.

Williamsburg—Cannery.—A stock company has been organized and arrangements will be made for the establishment of a cannery. Names of interested parties will be announced later.

Winchester—Electric-light Plant.—A committee was appointed to procure plans and specifications to erect an electric-light plant (to be run in connection with the pumping station) and the cost of same. The plant will consist of two 50-light arc dynamos of 2000 candle-power each, seventy-one arc lights of 2000 candle-power. Bids will be asked as soon as plans and specifications are completed. There is at the pumping station at present two good Corliss engines of 100 horse-power each; foundations for dynamos would be erected by the city. Address William R. Willis, secretary light committee.*

WEST VIRGINIA.

Charleston—Machine Works and Iron Foundry.—J. C. Brannan, of Athens, Ohio, is investigating with a view of removing his iron foundry and machine works to Charleston. The plant employs about twenty-five operatives. President Noyes, of the Charleston Business and Industrial Association, can be addressed for information.

Fayette County—Coal and Coke Company.—The Masterson Coal & Coke Co. has been incorporated, with a capital stock of \$1300, by J. W. Masterson, W. S. Thomas and J. H. Nickell, of Lansing; W. T. Timberlake and W. A. Burdette, of Hico, and Abe Forsyth, of Frayo. Address J. W. Masterson.

Irondale (P. O. at Raccoon)—Iron Furnace.—Philadelphia, Cincinnati and Wheeling capitalists have, it is stated, formed a company for the purchase and operation of the coal mines and blast furnace of the Irondale Company; C. R. Durbin, receiver, Grafton, W. Va., can be addressed for information.

Parkersburg—Water-works Extensions.—The city will vote August 14 on an issuance of \$35,000 in bonds for increasing the water supply and extending the mains; James V. Dunbar, city engineer.

St. Mary's—Drilling-tool Company.—The American Drilling Tool Co. has been incorporated, with a capital stock of \$50,000, by W. P. Kingsbury, of Parkersburg, W. Va.; H. P. Boyle, of Pittsburg, Pa.; A. J. Boyd, of Spencerville, O.; D. W. Reynolds and M. D. Hanes, of St. Mary's. Address the last named.

West Virginia—Cotton-gin Factory.—The Cheesman Cotton Gin Co. has been incorporated under the laws of West Virginia, with a capital stock of \$100,000, by J. Earl Cheesman, Dr. J. Alexander Stewart, Henry C. Stewart, Walter S. Logan and Marx E. Harby, of New York, for the purpose of introducing and manufacturing the Cheesman roller cotton gin. Address Walter S. Logan for further information.

Wheeling—Shoe-supply Factory.—It is stated that Eastern capitalists will establish a plant in Wheeling for the manufacture of shoe supplies, or a similar line of product, and when in operation will employ from 250 to 300 operatives; B. Walter Peterson can be addressed for further information.

Wheeling—Shoe-machinery Shops.—The McKay Shoe Machinery Co., of Boston, Mass., will establish in Wheeling a factory for making shoe machinery; building and power plant has been secured, also other machinery required.

BUILDING NOTES.

Aiken, S. C.—Hotel.—Henry Hahn will erect a three-story brick structure to be used as a hotel.

Anderson, S. C.—Warehouse.—At a recent meeting the Farmers' Warehouse Co. completed its organization, with R. S. Hill, president; J. J. Fretwell, vice-president, and R. E. Ligon, secretary and treasurer. A warehouse with a capacity of 5000 bales of cotton will be built.

Atlanta, Ga.—Club Building.—E. P. Black has submitted plans for the erection of a modern clubhouse for the Atlanta Athletic Club.

Baltimore, Md.—Buildings.—Permit has been granted to Judge W. A. Fisher, president of the Country School for Boys, to erect two frame buildings, one 25x96 feet and one 20x32 feet, to cost \$5000.

Baltimore, Md.—Dwellings.—Permits have been granted to H. S. Cox to erect a four-story brick building, 18x68 feet; to John Mueller to erect ten two-story brick dwellings to cost \$10,000.

Charlotte, N. C.—Stables.—Frank P. Milburn is preparing plans for the enlargement of J. W. Wadsworth Sons' livery stables.

Charlotte, N. C.—Warehouse.—Frank P. Milburn is preparing plans for the bonded warehouse to be built by the Merchants & Farmers' Warehouse Co. The building will be 280x160 feet, equipped with sprinkler system; contract will be let in September.

Chattanooga, Tenn.—Business Block.—S. T. Dewees has purchased site for \$15,000, and will erect a three-story brick business block.

Clarksburg, W. Va.—Commercial College.—The Central Commercial College and School of Shorthand has been incorporated, with a capital stock of \$1500, by W. I. Bower, S. T. Dougherty, R. L. Rudy and others, for the purpose of conducting a commercial college and school of shorthand.

Cleveland, Tenn.—Hotel, etc.—Dr. Fitch has secured control of seventy-five acres of land near the Lauderback Springs and will proceed at once to develop same; improvements to include a hotel, sanitarium, etc.

Cocoa, Fla.—Office Building.—W. A. Macduff has received contract for the erection of a three-story brick and stone structure, 200x100 feet, for the Florida Central & Peninsular Railroad Co.

Corsicana, Texas—Building.—A large brick and iron building will be erected. Address W. M. Tatum, who can probably give information.

Ensley, Ala.—Dwellings.—J. C. Musgrove will erect four one-story dwellings to cost \$4000.

Florence, Ala.—Residence.—Major B. A. Rogers will erect a \$4000 residence.

Fulton, Ky.—Church.—The congregation of the Fulton Baptist Church will erect a new edifice. Address "The Pastor."

Gallatin, Tenn.—Residence.—William Hall will erect a residence.

Ganado, Texas—Bank Building.—N. P. Mauritz & Son have contracted for the erection of a bank building.

Greensboro, N. C.—Warehouse.—E. P. Wharton, acting as agent for B. J. Fisher, will erect a tobacco warehouse, with brick foundation, floor space 80x168 feet.

Grove Hill, Ala.—Courthouse.—The Court of County Commissioners at a recent meeting decided to erect a \$15,000 courthouse.

Jacksonville, Fla.—Business College.—R. W. Massey, J. H. King and Marvin Linn have incorporated the Massey Business College of Jacksonville, with a capital stock of \$1000, to conduct a general business college.

Knoxville, Tenn.—Association Building.—A three-story building, to cost \$50,000, is projected for the Y. M. C. A.; Rev. Thomas C. Warner can be addressed.

Richmond, Va.—Warehouse.—Stephen Putney & Co. will build a new warehouse.

Laurel, Md.—School Building.—Contract for the erection of the high-school building has been awarded to James T. Loveless at \$8345.

Lexington, Ky.—Courthouse.—The Fiscal Court has ordered an election to be held in November to vote upon an issuance of \$100,000 in bonds for the erection of the proposed new courthouse and for other improvements. Address the "County Clerk."

Louisville, Ky.—Parsonage.—Permit has been granted to the Lander Memorial Church for the erection of a \$3200 parsonage.

Louisville, Ky.—Dwellings.—Permits have been granted to George M. Davis to erect an addition to brick building to cost \$6700; to George Deckman for brick dwelling to cost \$8000.

Manchester, Va.—Warehouse.—Stephen, Putney & Co. have decided to erect a new warehouse to be equipped with an electric car, etc.

Montgomery, Ala.—Hotel.—H. B. Plant (of New York city) will probably erect a large hotel.

Newport News, Va.—School Building.—H. W. Johnson has been awarded contract at \$9600 for the erection of the Rocketts school building. Address secretary board of school trustees.

Owensboro, Ky.—Store Building.—Will Bros. will erect a large three-story brick and stone building of modern design.

Portsmouth, Va.—Hotel.—Henry Kirn is preparing for the erection of a large hotel of the most modern design.

Portsmouth, Va.—School Building.—Plans and specifications for a new school building to be erected in Prentice Place are desired by the Western Branch school board until August 19. For further information address George Lindsay or C. C. Peed.

Princeton, Texas—School Building.—Contract has been let for the erection of a school building.

St. Louis, Mo.—Bathhouse.—Permit has been granted to A. H. Handlan for the erection of a bathhouse 25x104 feet, to cost \$8000.

St. Louis, Mo.—Buildings.—Permits have been issued to the following: Frederick Berwies, to erect a two-story store and flat, \$3000; Herman Alles, for two-story flats, \$4200; Dr. A. Schmidt, two-story private hospital, \$3500; Thomas Fagin, two-story dwelling, \$4000; Philip G. Schroeder, two-story dwelling, \$3200; Rutledge & Kilpatrick, two-story stable, \$1000; J. H. Heldbrenner, two-story dwelling, \$2400; Frank Ellis, three one-story frame dwellings, \$1850; John B. Westermayer, two-story store and dwelling, \$2500; William Richardson, two-story dwelling, \$2500; Rev. James J. McCable, church, \$35,000; John G. Hummel, two-story dwelling, \$3000; F. S. Hollowell, two-story residence, \$1800; L. Hindt, two-story addition to dwelling, \$1000; George Wohlstaetter, three-story dwelling, \$2600; Henry Mehl, one-story dwelling, \$1000; George L. Merk, two two-story dwellings, \$5000; James E. Powers, two-story dwelling, \$3500; Julius Lesser, two-and-a-half story dwelling, \$14,000; Thomas Watkins, one-story dwelling, \$1400; Jennie Anderson, two-story dwelling, \$2250; Louisa Schmidt, two-story dwelling, \$1900; Mrs. Anna B. Helderman, five-story mercantile building, \$14,000; A. A. Handlan, two-story store or bathhouse, \$8000; A. A. Fischer, two-and-one-half-story dwelling, \$4000; Fred Schmidt, two-story dwelling, \$5000; A. H. Ellers, addition to building, \$15,000; Conrad Schopp, four-story storage-house, \$10,000; Mount Calvary Church, addition to church, \$1000; Mrs. E. A. Watson, two-story dwelling, \$3000.

St. Louis, Mo.—Storage-house.—Conrad Schopp has received permit to erect a storage-house 30x115 feet, four stories; estimated cost \$10,000.

St. Stephens, Ala.—Jail.—The county commissioners have decided to erect a \$5800 jail.

Suffolk, Va.—Bank Building.—The Farmers' Bank has let contract to E. Tattersall for the erection of a bank building. Address W. H. Jones, Jr., cashier, for further information.

Tifton, Ga.—Depot.—The Georgia Southern & Florida, the Brunswick & Western, of the Plant system, and the Tifton & Northeastern, from Tifton to Fitzgerald, have agreed to erect a union passenger depot at a cost of \$5000. Address President H. H. Tift, Tifton, Ga., for information.

Williamson, S. C.—Church.—Sealed proposals are invited for the erection of a building for the Methodist Church; bids received until August 27. For plans and specifications address S. Lander, secretary building committee.

Wilmington, N. C.—Hotel, etc.—Cyrus & Van Amringe has had plans prepared for a two-story hotel to contain thirty rooms, water works and all modern conveniences, including the erection of two large bath-houses, which will contain fourteen rooms each, with sprinklers, etc., to be erected at Ocean View.

RAILROAD CONSTRUCTION.

Railways.

Beaumont, Texas.—The Gulf, Beaumont & Kansas City has made a contract with E. Hanson to build the proposed 10-mile extension out of Kirbyville. John H. Kirby, of Houston, Texas, is president of the company.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Bag Machinery.—Nevil A. Puech, No. 351 Carondelet street, New Orleans, La., wants addresses of manufacturers or dealers in machinery for making inside and outside sugar-filtering bags.

Boiler.—J. Van Lindley, Pomona, N. C., wants to buy a second-hand three to five-horse-power steam boiler, horizontal or upright.

Boiler and Engine.—E. L. Folk & Co., Suffolk, Va., want to buy a 12 or 15-horse-power engine and 20-horse-power boiler; second-hand in good condition will answer purpose.

Boiler and Engine.—See "Woodworking Machinery."

Bottling Equipment.—Little Rock Brewing & Ice Co., Second and Byrd streets, Little Rock, Ark., will buy bottlers' outfit.

Bridge.—George W. Kile, president police jury, Natchitoches, La., will receive sealed bids until September 15 for the construction of an iron bridge across Johnson Chute, Natchitoches parish.

Bridge.—Sealed proposals will be received by the commissioners of Baltimore county, Towson, Md., until August 17 for the rebuilding of the iron bridge at Monkton Mill. Sealed proposals will be received by the commissioners until the above date for a new iron bridge on same stream near first-named bridge; length of span between abutments fifty feet. Bidders will furnish their own plans and specifications and strain sheets; plans of stonework can be seen at commissioners' office; usual rights reserved; B. H. Mays, superintendent of bridges.

Broom-making Machinery.—W. G. Powell, Tallahassee, Fla., wants to correspond with parties who will give desired information and data for a small experimental plant for making brooms out of the saw palmetto.

Canning Machinery.—W. A. Johnson & Co., Albany, Ga., want information and cost of a small fruit-canning plant.

Cement, Lumber, Steelwork, etc.—Proposals will be opened September 16 for furnishing and delivering cement, broken stone, yellow-pine lumber, steel bolts, steel beams and cast-iron columns at Fort Monroe, Va. For information address Thomas L. Casey, captain engineers, 106 Granby street, Norfolk, Va.

Coal.—E. L. Folk & Co., Suffolk, Va., want to correspond with wholesale hard coal dealers and miners.

Compress or Baler.—Mallett Bros., Leighton, Ga., want a hand-power hay press or baler; one which two men can work.

Conveying-machinery Supplies.—Hays Construction Co., Troy, Ohio, is in the market for three or more contractors' bottom-dumping buckets, either iron or steel, and having a capacity for one or one-and-one-half yards of material; new or second-hand.

Corn Mill.—John A. Trollinger, Haw River, N. C., is in the market for a corn mill with daily capacity of 100 to 125 bushels.

Electric-light Plant.—Bids will shortly be asked on the erection of an electric-light plant of two 50-light arc dynamos of 2000 candle-power each; seventy-one arc lights of 2000 candle-power. Foundations for dynamos to be erected by the city. Address Wm. R. Willis, secretary light committee, Winchester, Va.

Elevator.—See "Fertilizer-factory Equipment."

Elevator.—Power Grocery Co., Paris, Ky., wants to buy a hydraulic elevator and an iron front for storeroom.

Elevator.—The White-Hall Company, Dillwyn, Va., is in the market for an elevator to be run by hand or to be arranged so that power can be applied later; must be sufficiently large and strong to carry 1500 pounds.

Engine.—Whiting Lumber Co., Elizabethton, Tenn., wants to purchase new or second-hand one to ten-horse-power horizontal steam engine.

Engine.—W. M. Angas, 20 Hogan street, Jacksonville, Fla., will be in the market for engine capable of indicating 120 horsepower, with 100 pounds steam in boiler; cross-compound-condensing preferred, but condenser not needed.

Feed Mill.—John A. Trollinger, Haw River, N. C., is in the market for feed mill for grinding grain for stock.

Fertilizer-factory Equipment.—Arminius Chemical Co., William H. Adams, general manager, Mineral City, Va., wants a gasoline engine and holst, attrition mill, elevator, screens, bagging machine and scales for fertilizer factory.

Fire-alarm System.—Cary W. Butt, W. B. Delchamps and Foster K. Hale, fire department committee of the general council of the city of Mobile, Ala., will receive sealed proposals until September 15 for a complete fire-alarm system; plans and specifications will be sent to parties making application to the chief engineer of the fire department or to the city clerk; all bids must be accompanied by a certified check to the order of J. C. Bush, mayor, for \$1000; usual rights reserved.

Fire and Police-call System.—District Messenger & Fire Alarm Co., Dallas, Texas, is in the market for four D. P. ink-writing registers, twenty-five police-call boxes, 100 messenger-service boxes, fifty fire-call boxes, inside use, twenty-five for outside use, twenty miles of wire, two sets of telephone instruments, bluestone, zinc, etc.

Flour-mill Machinery.—J. H. McIlwain, Gibson, N. C., wants to correspond with manufacturers of patent roller-flour-mill machinery for mill with capacity of from fifteen to forty barrels per day.

Foundry Equipment.—John G. Sanders, Monroe, La., wants to buy a traveling crane, about three tons capacity, to travel over an area 20x40 feet, for foundry use.

Foundry Equipment.—The Brunswick Foundry, Machine & Manufacturing Co., R. E. Briesenick, manager, Brunswick, Ga., will be in the market for an entire outfit for foundry and machine shops.

Gas and Electric Fixtures.—Commissioners' Court of Galveston county will receive bids on furnishing and hanging the combination gas and electric fixtures for the new courthouse until September 12; designs, specifications and blank bids at office in Avery Building, Galveston, Texas; Sanguinet & Messer, architects.

Gasoline Engine.—See "Fertilizer-factory Equipment."

Gasoline Engine.—The town council of Eustis, Fla., wants to buy a gasoline engine, ready for operation in ten seconds, and guaranteed to be effective as a fire extinguisher. Address "The Mayor."

Gas Plant (Acetylene).—William T. Gregory, Rocky Mount, N. C., wants prices, etc., on acetylene-gas generators, gasometers, pipe fittings, etc., for gas plant, catalogues of street lamps, fittings, fixtures and everything pertaining to acetylene gas; will put in 600-light machines.

Gun Forgings.—Proposals for furnishing four-inch and 14-pounder gun forgings will be received at the Navy Department, Washington, D. C., until August 24. Forms of proposal and information may be obtained from the Bureau of Ordnance, Navy Department, John D. Long, secretary.

Heating Apparatus.—R. E. Wilburn, Lexington, Miss., wants to communicate with manufacturers of a heating apparatus for heating a one-story church.

Hoisting Equipment.—See "Fertilizer-factory Equipment."

Ink (Printers') Machinery.—Colorado Printing Ink & Roller Co., Denver, Col., is in the market for machinery for manufacturing printers' ink.

Knitting Machinery.—J. R. Smith, care of Georgia & Alabama Railway, Savannah, Ga., wants to buy hosiery-knitting machinery.

Laundry.—W. A. Johnson & Co., Albany, Ga., want information and cost of a small laundry plant.

Machine Tools.—See "Foundry Equipment."

Machine Tools.—Martin-Dacey Machine Co., Florence, Ala., is in the market for one lathe, 48-inch swing; also a stock of steam-fittings and mill supplies.

Machine Tools.—The Eagle Foundry, Nos. 188 and 190 Water street, Norfolk, Va., wants a new or second-hand patternmakers' trimmer, about size No. 6, and a lathe of 20-inch to 24-inch swing.

Metal-working Machinery.—Ornamental Iron & Wire Co., Chattanooga, Tenn., wants to buy one eight-inch and one five-inch stamp.

Oil-mill Equipment.—Lexington Compress

& Oil Mill Co., R. E. Wilburn, president, Lexington, Miss., will buy a 30-ton oil mill.

Paving.—Bids will be opened September 8 for 7788 square yards of vitrified brick paving on six inches of concrete at Monroe, La. (See adv.)

Pump.—W. M. Angas, 20 Hogan street, Jacksonville, Fla., will be in the market for a compound duplex pump, about 10-inch diameter discharge pipe.

Railway Equipment.—W. M. Angas, 20 Hogan street, Jacksonville, Fla., will be in the market for a small locomotive, three-foot gauge.

Seawall, etc.—United States Engineer Office, No. 9 Pleasant street, Baltimore, Md.—Proposals will be received until September 9 for building seawalls and embankments on North and Hawkins Points, Maryland. For information apply to Charles W. Kutz, lieutenant engineer.

Scales.—See "Fertilizer-factory Equipment."

Shafting.—H. L. Beach, Montrose, Pa., is in the market for turned steel shafting.

Steam Fittings and Mill Supplies.—See "Machine Tools."

Tannin Machinery.—W. G. Powell, Tallahassee, Fla., wants to correspond with manufacturers of tannin machinery, with a view of obtaining full information regarding the industry.

Telephone Equipment.—See "Fire and Police-call System."

Tin.—B. T. Johnson, Jr., Narrows, Va., wants prices on tin for manufacturing.

Water Works.—A committee has been appointed to advertise for bids and specifications for a filter for the Rome water works. Address J. W. Rounsaville, chairman committee, Rome, Ga.

Water Works.—The Louisville (Ky.) Water Co. will receive bids until September 1 on the erection of a new filter with 25,000,000 gallons daily capacity. The plant will include a clear-water reservoir, filter station, standpipe and pumping station. Blank forms and full particulars furnished on application. Address Charles R. Long, president.

Wells.—Sealed proposals will be received until August 22 at the office of the commissioners of the District of Columbia, Washington, D. C., for driving wells in the District of Columbia; specifications and blank forms of proposals may be obtained at office; J. B. Wright, J. W. Ross and L. H. Beach, commissioners, District of Columbia.

Wire.—William A. Johnson, Narrows, Va., wants prices on bed-spring wire.

Woodworking Machinery.—W. E. Carson, Riverton, Va., wants one large and one small-size handle turning lathe, either Ober, Defiance or Merritt pattern.

Woodworking Machinery.—Eagle Foundry, Nos. 188 and 190 Water street, Norfolk, Va., wants a second-hand or new patternmakers' lathe, 20-inch to 24-inch swing, and a band saw, 30-inch to 36-inch wheel.

Woodworking Machinery.—Baggett & Cowan, Douglasville, Ga., want to buy one 50-horse-power engine, one 60-horse-power boiler, one 26-inch surface planer, one 36-inch tilting-table band saw, one 12-inch hand joiner, one heavy double-spindle shaper, one "Invincible" sander and one swing cut-off saw.

TRADE NOTES.

Buffalo Engines and Fans.—The large fans and engines required for refitting the United States cruiser Buffalo have been purchased from the Buffalo Forge Co., of Buffalo, N. Y., maker of the "Buffalo" engines and fans. The engines are of the double-enclosed upright type, direct connected to the fans, and run in oil. The fans each have capacity to deliver 22,000 cubic feet of air per minute at one ounce pressure, and their heights are seventy inches over all. The engines are designed for a very high steam pressure, and are provided with large bearing surfaces to insure maximum smoothness of operation at sustained high speeds.

A Handsome Reminder.—A handsome and most attractive reminder has been received by the Manufacturers' Record from Mr. Geo. A. Cragin, agent of the Washburn & Moen Manufacturing Co. (of Worcester, Mass.) at Houston, Texas. The reminder takes the form of a miniature portrait, about cabinet size, of a lady in walking costume, handsomely colored and most effectively presented in a gilt frame suitably made for use as a desk ornament. Mr. Cragin's principals manufacture the well-known "Crown" rubber-covered wire, which is used behind decorations of residences, churches, office buildings and other structures, insuring proper transmission of electricity and the greatest protection against fire from the electrical

current. Besides the "Crown," Mr. Cragin handles almost every kind and variety of wire that is made, all the product of his company.

Dynamo and Motor Business for Sale.—An established dynamo and motor manufacturing business, protected by valuable patents, is being offered for sale by the owners. The product of the plant has a good reputation as first-class machines at moderate prices. The line of dynamos runs up to 250 lights, with motors to correspond; a new patent brush holder is also part of the product, and recently the company has perfected an automatic voltage regulator which has not yet been placed on the market. Most excellent reasons will be furnished for offering this establishment at such a low price (\$10,000). For further information address "Electricity," care of Manufacturers' Record.

Retained as Consulting Engineers.—Messrs. Lathbury & Spackman, of 1619 Filbert street, Philadelphia, Pa., have been retained as engineers to design and furnish specifications and superintend the erection of a cement plant to be located at Wellston, Ohio, to have an ultimate capacity of 1000 barrels per day. They have also been retained as engineers for the erection of new plant at Siegfried, Pa., to have a capacity approximately of 2000 barrels per day of Portland and common cements. The firm has also finished plans and specifications for the enlargement and reconstruction of the plant of the Portland Cement Co., at Salt Lake City, which was totally destroyed by fire in June. Firm has also finished plans and specifications for the introduction of the rotary system of burning cement at the large works of the Aalborg Portland Cement Co., Copenhagen, Denmark. The machinery is being constructed in this country at the present time, and will be shipped to Denmark in the course of a month. In all of the above plants there will be introduced the system of burning in rotary kilns, using pulverized coal as a fuel.

TRADE LITERATURE.

Revised Quotations.—The completion is announced of the sheet-metal department of the Jeffrey Manufacturing Co., at Columbus, Ohio, specially equipped for the manufacture of Jeffrey standard elevator buckets and spiral conveyors, as per catalogue now ready. In addition to the well-known Jeffrey specialties in the line of chain elevating and conveying machinery, the company now solicits orders for elevator buckets and spiral conveyors.

Electrotyping, Stereotyping and Photo-engraving Machinery.—In presenting their new catalogue, Messrs. R. Hoe & Co. invite attention to their superior facilities for producing machinery and materials of the highest grade used in the operations of electrotyping, stereotyping and photo-engraving. The firm's world-wide reputation as builders of the class of machinery referred to is well known. Its works in New York and London have a floor area of twelve acres, and over 2500 men are employed, including the draughtsmen and machinists of the most skill, and modern perfected tools and machines are constantly being added. Interested parties may obtain catalogues by addressing R. Hoe & Co., 504 Grand street, New York city.

Yellowstone Park and Omaha Exposition—Personally-Conducted Tour via Pennsylvania Railroad.

The Yellowstone National Park is unquestionably one of the most interesting regions on the globe, for within it is displayed the greatest collection of nature's manifold wonders. Indeed, this mountain-bound plateau, high up on the summit of the everlasting Rockies, is a veritable playground for the world's giant forces.

The personally-conducted tour of the Pennsylvania Railroad Co., which leaves New York on September 1, affords the most satisfactory means of visiting this wonderful and viewing its marvelous features. A stop of two days will be made on the return trip at Omaha, affording an opportunity to visit the Trans-Mississippi Exposition. Tourists will travel by special train of Pullman smoking, dining, sleeping and observation cars in each direction. Eight days will be spent in the Park. A stop will also be made returning at Chicago. The round-trip rate, \$235 from Baltimore, covers all necessary expenses.

For detailed itineraries and full information apply to ticket agents, or R. Courlander, Jr., passenger agent, Baltimore and Calvert streets, Baltimore.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Virginia Deferred Certificates.

At the request of holders of a large amount of the Virginia deferred certificates (representing the debt allotted to West Virginia on the creation of that State), John Crosby Brown, George Coppell, J. Kennedy Tod and Clarence Cary have agreed to act as a committee, and, in conjunction with R. P. Chew, of West Virginia; Virginius Newton, of Virginia, and other citizens of the two States, to make an effort to obtain a compromise and settlement of this interstate debt. Mr. Brown is chairman, and Robert L. Harrison, secretary, and Cary & Whittidge are counsel of the committee. This is an undertaking in line with the successful settlement of the Virginia State debt some years ago. Several attempts have been made in the past to secure a settlement with West Virginia, but although in the hands of persons of high standing, the work has been futile. One reason for the failures is said to relate to some personal questions raised in West Virginia. The new movement is in the hands of persons who have never before been connected with the former attempts. They have taken up the project at the request of some influential citizens of Virginia and West Virginia who have not been associated with the other movements, and they have received reasonable assurances that it will go through. Holders of certificates who desire to take part in the movement should deposit their certificates or trust receipts representing them with Brown Bros. & Co., so that arrangements may be made in time to submit a proposition to the next legislature of West Virginia. The agreement under which deposits are invited provides that when a majority of them have been secured the committee shall formulate a practicable plan of settlement and submit it to an advisory board, consisting of Thomas F. Bayard, William Pinkney Whyte, Edward J. Phelps and George G. Williams. If this board recommends the plan it will be published for thirty days, and if accepted by a majority in value of the deposited certificates, it will be presented to the legislature. The cost of the settlement, if effected, is to be assessed on the bonds that are received, and is not to exceed 5 per cent. on the par value of the certificates originally deposited.

North Carolina Bankers.

The North Carolina Bankers' Association, at Charlotte, elected the following officers: President, W. A. Blair, Winston; first vice-president, Thos. W. Dewey, Newberne; second vice-president, Jos. G. Brown, Raleigh; third vice-president, Geo. W. Montcastle, Lexington; secretary and treasurer, John M. Miller, Jr., Charlotte; executive committee, W. A. Blair, Winston; W. A. Hunt, Henderson; W. E. Gordan, Goldsboro; W. E. Sawyer, Asheville; A. S. Brenezer, Charlotte.

New Corporations.

Messrs. N. P. Mauritz & Son, of Ganado, Texas, will establish a private bank.

The bank of Lavonia, Ga., with a capital stock of \$25,000, has been opened, with Mr. W. S. Witham, president, and E. Cyle Farmer, cashier.

The State of Missouri has chartered the Farmers and Merchants' Bank of Wheeling, capital stock \$10,000; incor-

porators, E. B. Delemetre, C. L. Rogers, J. B. Tracy and others, of Wheeling, Mo.

The comptroller has authorized the Lincoln County National Bank of Stanford, Ky., to commence business with a paid-up capital of \$100,000. Samuel H. Shanks is president, and John E. Owsley, cashier.

The Bank of Jonestown, Coahoma county, Mississippi, has been chartered, with a capital stock of \$25,000, which may be increased to \$50,000; incorporators, W. R. Sadler, W. C. Weathersby, L. F. Weathersby, W. L. Ganong, Geo. Richberger, L. Marks, J. W. Cutrer and their associates.

New Securities.

One hundred and twenty-five thousand dollars' worth of the recent issue of Baltimore city stock was sold in New York this week at 107.

An issuance of \$22,000 in bonds for a water-supply system has been authorized by the city of Greensboro, Ga. Address J. B. Williams, mayor.

The city of Parkersburg, W. Va., will vote August 14 on issuing \$35,000 of water-works extension bonds; Jas. V. Dunbar, city engineer.

The city of Newport News, Va., will receive proposals until September 6 for \$40,000 in 4½ per cent. bridge bonds. Address J. A. Massie, city clerk.

Fayette county, Kentucky, will vote in November on the question of issuing \$100,000 in 4 per cent. bonds for courthouse purposes. Address the Fiscal Court at Lexington, Ky.

Mason county, Kentucky, will probably vote November 8 next on the question of issuing \$60,000 in bonds for road improvements. The clerk of the Fiscal Court may be addressed at Maysville, Ky.

The reorganization committee of the Eagle & Phoenix Mills, of Columbus, Ga., has authorized the immediate issuance of the \$500,000 of bonds as planned and announced lately. Only \$400,000 of this amount will be placed on the market; G. Gunby Jordan, president.

The Maryland Casualty Co. of Baltimore has decided to increase the capital stock from \$250,000 to \$500,000. The surplus will also be doubled to \$200,000 from \$100,000. The company has established agencies through the country, and will open an office in New York September 1. The officers are John T. Stone, president; Aubrey Pearre, vice-president; Robert S. Elder, Jr., secretary, and Jos. Walters, treasurer.

Dividends and Interest.

The Cannon Manufacturing Co., of Concord, N. C. (cotton mill), has declared a semi-annual dividend of 5 per cent.

The J. D. Boyd Manufacturing Co., of Griffin, Ga., has declared a dividend of 8 per cent., besides laying aside a sinking fund.

Financial Notes.

The Mutual Loan & Building Co., of New Orleans, La., has declared a semi-annual dividend of 4 per cent., or \$1 per share; W. W. Weiss, secretary.

Messrs. Sperry, Jones & Co., of Baltimore, have written a letter to the Montgomery Advertiser advocating for Alabama a provision for a limitation of the debt by municipalities and counties of the State. They claim that there is no objection to a limited tax rate if there is also a limited debt rate, but that it is unfair to have one without the other.

The stockholders of the Bank of Batesville, Batesville, Ark., held their first annual meeting on August 10, 75 per cent. of the capital stock being represented in person and by proxies. The annual re-

TABLE OF CONTENTS.

EDITORIAL:	Page
Unity of Southern Ports.....	47
And Now to Business.....	47
Industrial Training South.....	47
Against Militant Dishonesty.....	48

Progress in the South.....	48
Industries at Augusta.....	48
Corsicana Developing.....	48
Shipbuilding and Commerce.....	48
Industrial News from Birmingham.....	48
New York and Philadelphia Iron and Steel Markets.....	48
Foreign Industrial Notes.....	48

RAILROAD NEWS:

Enterprise at Charleston Having Its Reward.....	50
Chesapeake & Ohio.....	50
B. & O. Washington Branch.....	50
New Road Incorporated.....	50
Railroads in Mississippi.....	50
Alabama Car Service.....	50
Railroad Notes.....	50
Opportunities at Louisville.....	50

COMMERCE:

Baltimore and Cuba.....	51
Grain at New Orleans.....	51
Direct Cotton Exports.....	51
The Month's Commerce.....	51
Jottings at the Ports.....	51
Jacksonville's Electric Plant.....	51

TEXTILES:

New England Mill Men.....	52
To Add 5000 Spindles.....	52
May Have a Southern Branch.....	52
To Expend \$50,000 for Improvements.....	52
Expects to Add 5000 Spindles.....	52
Textile Notes.....	52

COTTONSEED OIL:

The Market for Cottonseed Products.....	52
Cottonseed-Oil Notes.....	52
General Notes.....	52
Literary Notes.....	52

PHOSPHATES:

Phosphate Markets.....	53
Phosphate and Fertilizer Notes.....	53
The New South.....	53

MECHANICAL:

"Bliss" Special Power Press (Illus.).....	53
Box-Board Cut-Off Saw (Illus.).....	53
Iron-Body Angle Blow-Off Valves (Illus.).....	53
Stock in the South.....	53

LUMBER:

Lumber Market Reviews:	
Baltimore.....	54
Savannah.....	54
Mobile.....	54
St. Louis.....	54
Lumber Notes.....	54
Trade Notes.....	54

CONSTRUCTION DEPARTMENT:

New Enterprises.....	54
Building Notes.....	54
Railroad Construction.....	54
Machinery Wanted.....	54
Trade Literature.....	54

FINANCIAL NEWS:

Virginia Deferred Certificates.....	54
North Carolina Bankers.....	54
New Corporations.....	54
New Securities.....	54
Dividends and Interest.....	54
Financial Notes.....	54

port declares a net dividend of 10 per cent., which is "passed to surplus." The annual election of officers resulted in the re-election of C. B. Vance, president; B. Jones, vice-president, and B. F. Whittington, cashier; directors, C. B. Vance, M. B. Jones, P. H. Lowrey, A. S. Kyle, J. T. O'Bryant, B. F. Whittington and A. Smallwood.

Cheap Lands in East Texas.

East Texas lands are attracting the attention of the homeseeker. The low price of land, in connection with the certainty of crops, makes this a most desirable location for the farmer. Most of the counties penetrated by the International Great Northern Railroad between Louisville, Galveston and Columbia, through local organizations, are making flattering offers to settlers. Inquiries addressed me regarding any particular location will be placed in the hands of responsible parties for reply. D. J. Price, A. G. P. I. & G. N. R. R., Palestine, Texas.

Hambleton & Co.

Bankers and Brokers,

Members New York and Baltimore Stock Exchanges.

9 South Street, BALTIMORE.

High-grade Investment Bonds, Municipal, Railway, Industrial.

Letters of Credit Available Everywhere.

Southern Investments.

Stocks, Bonds and Industrials.

American Promoting & Trust Co.

23 Doane St., BOSTON.

JOHN L. WILLIAMS & SONS,

BANKERS,

Dealers in RICHMOND, VA.

Southern Investment Securities,

MUNICIPAL BONDS A SPECIALTY.

Correspondence Invited.

TO CONTRACTORS.

If you have any municipal bonds or warrants, taken in payment for building waterworks, court or school houses, jails, etc., write us. Conditions being favorable, we can use them.

F. M. STAFFORD & CO.

Dealers in Southern Municipal Securities, Chattanooga, Tenn.

J. WM. MIDDENDORF.

Members Baltimore Stock Exchange.

WM. B. OLIVER.

MIDDENDORF, OLIVER & CO.**BANKERS AND BROKERS,**

No. 213 E. German Street, [KEYSER BUILDING.] Baltimore, Md.

Stocks and Bonds Bought and Sold on Commission. Special attention given to Municipal and other Investment Loans. Dealers in Foreign Exchange. Drafts on Europe and Letters of Credit furnished.

TO THE HOLDERS OF THE

Virginia Deferred Certificates:

The undersigned, at the request of the holders of a large amount of Virginia Deferred certificates, have agreed to act as a committee to receive the deposit of the said certificates and to take measures in connection with eminent citizens of West Virginia and Virginia, to ascertain the amount of the debt due from West Virginia, and to submit a plan for the compromise and settlement of the same to an advisory board, composed of Hon. THO. F. BAYARD, Hon. E. J. PHELPS, Hon. PINKNEY WHYTE and GEO. G. WILLIAMS, Esq., and thereafter to the holders of the certificates.

Certificates, or Trust Receipts therefor, should be deposited with the committee, at Messrs. BROWN BROTHERS & COMPANY, 59 Wall St., New York City, as soon as possible, in order that action may be taken before the coming session of the Legislature of West Virginia.

Negotiable Receipts will be issued for Certificates, or for the Trust Receipts representing them. Copies of the agreement under which the same are to be received will be furnished upon application at the Depository.

JOHN CROSBY BROWN, Chairman
GEORGE COPPELL, J. KENNEDY TODD, CLARENCE CARY, Committee.

ROBERT L. HARRISON, Secretary.
CARY & WHITRIDGE, Counsel, 59 Wall St.

If you wish to keep posted on the progress of the South, read the *Manufacturers' Record*. Price \$4.00 a year.

MARYLAND TRUST CO.

Corner South and German Sts.,

BALTIMORE.

CAPITAL, - - \$1,000,000.00

SURPLUS, - - - 500,000.00

A LEGAL DEPOSITORY FOR COURT AND TRUST FUNDS.

Acts as Financial Agent for States, Cities, Towns, Railroads and other Corporations. Transacts a general trust business. Lends money on approved security. Allows interest on special deposits. Acts as Trustee under Mortgages, Assignments and Deeds of Trust; as Agent for the Transfer or Registration of Stocks and Bonds, and for the payment of coupons, interest and dividends.

J. WILLCOX BROWN, PRESIDENT.**LLOYD L. JACKSON, FIRST VICE-PRES.****HENRY J. BOWDOIN, SECOND VICE-PRES.****J. BERNARD SCOTT, Secretary and Treasurer.****DIRECTORS.**

J. Willcox Brown, Leopold Strouse,
Wm. A. Marburg, Henry Walters,
Basil B. Gordon, H. A. Parr,
Lloyd L. Jackson, R. N. Baker,
Geo. A. von Lingen, Andrew D. Jones,
H. J. Bowdoin, James Bond,
Joshua Levering, Alexander Brown,
Frank Brooks, John A. Tompkins,
W. B. Brooks, Jr., Clayton C. Hall,
W. H. Baldwin, J. D. Baker,
Fred'k W. Wood, Joseph E. Willard,
F. M. Thieriot.

Maryland Casualty Co.

Keyser Building,

Calvert and German Streets,
BALTIMORE.

The Only Company of its kind in Maryland or the South.

Cash Capital, - - - \$250,000

Cash Surplus, - - - 100,000

Inspects and Insures Boilers and Elevators.

Insures Plate Glass.

Issues all forms of Accident and Liability Policies.

Managed and Superintended by Trained and Experienced Men.

YOUR BUSINESS SOLICITED.**OFFICERS:**

JOHN T. STONE, President.
AUBREY PEARRE, Vice President.
ROBT. N. ELDER, Jr., Secretary.
JOSEPH WALTER, Treasurer and Local Supt.
JOSIAH G. CLOUD, Supt. of Agencies.
MARSH & BOWDOIN, General Counsel.

DIRECTORS:

Wilmer Brinton, John M. Hood,
Alexander Brown, George C. Jenkins,
Henry J. Bowdoin, Lloyd L. Jackson,
Daniel E. Conklin, J. W. Middendorf,
Charles H. Dickey, Seymour Mandelbaum,
Louis F. Detrick, Aubrey Pearre,
Wm. J. Donnelly, George A. Pope,
Emanuel Greenbaum, Simon Rosenberg,
Jackson C. Gott, Ernst Schmeisser,
W. H. Gorman, John T. Stone,
Douglas H. Gordon, Charles J. Taylor,
Louis K. Gutman, J. Skeeton Williams,
George R. Webb.

AGENTS EVERYWHERE.**North American Trust Company**

NEW YORK: 100 BROADWAY. LONDON: 95 GRESHAM ST.

Capital paid up....\$1,000,000

Surplus.....\$200,000

W. L. TRENHOLM, President.

Transacts a general trust business.
Allows liberal rates of interest on deposits and trust funds.

Issues Letters of Credit and Travellers' Circular Notes payable in dollars or in the money of any foreign country.

Acts as Trustee under mortgages for railway and other companies, and as Agent for the Registration of the stock, and for the transfer of the shares of incorporated companies.

Undertakes the examination of properties offered as security for bond issues, and the obtaining of expert information concerning the actual facts and prospects of reorganization proposals.

Qualified and empowered to act as executor, administrator, trustee, guardian, and assignee, and as receiver and custodian of funds under orders of Court.

The NORTH AMERICAN TRUST COMPANY has established a branch office at SANTIAGO, and is prepared to buy and sell drafts on and to make payments in SANTIAGO and to transact a general banking business. The COMPANY is also prepared to receive the deposits of the SOLDIERS and SAILORS now in CUBA, and, under their directions, to make remittances to their families in the UNITED STATES, also to investigate and report in an advisory capacity about new enterprises in ALL LINES OF TRADE AND MANUFACTURING as well as in CITY PROPERTIES, WINTER HOMES, ELECTRIC PLANTS, RAILROADS, INDUSTRIES, SUGAR AND TOBACCO PLANTATIONS, in CUBA, PUERTO RICO, and the PHILIPPINES, by holding in trust PROPERTIES, CONTRACTS, MORTGAGES, and BONDS, either pending the closing of negotiations or for more extended or more definite periods.

Special attention is called to the relations of the COMPANY already established at MANILA with the CHARTERED BANK OF INDIA, AUSTRALIA and CHINA, sufficient for the present needs of our MANUFACTURERS, MERCHANTS, TRAVELLERS, SOLDIERS, and SAILORS.

Mercantile Trust & Deposit Co.

OF BALTIMORE.

Paid-up Capital, \$1,000,000.

Surplus, \$1,000,000.

DEPOSITS RECEIVED

On which interest is allowed, governed by current rates obtainable.

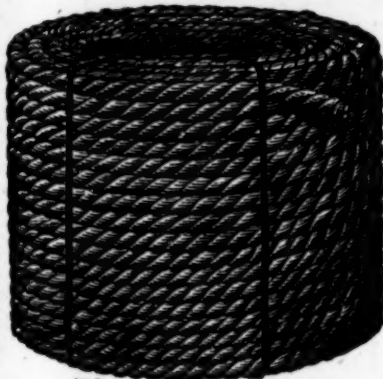
TRUSTEES AND ADMINISTRATORS.

This company is a *Legal Depository* for funds in the hands of Trustees or Administrators, and allows interest on same pending distribution.

Authorized to act as Executor, Administrator, Guardian, Receiver or Trustee.

ACTS as Trustee of Mortgages of Corporations and accepts Transfer Agency and Registry of Stocks.

Safe Deposit Boxes for Rent.
Vaults supplied for Storage of Silver Chests, etc.

JOHN GILL, of R., President.**The American Manufacturing Co.**

Main Office:

67 Wall Street, New York.

Mills:

West, Milton, Noble and Oak Streets, Greenpoint, Brooklyn.

MANUFACTURERS OF

CORDAGE

The **QUALITY** of Our Rope is Our **FIRST** Consideration, the Cost is Secondary.

Send for Information About Transmission Rope.

Ours is the Best Made.

Alphabetical Index of Advertisers.

For "Classified Index" see pages 3, 5 and 7.

A		H		N	
Abendroth & Root Mfg. Co.....	15	Chesapeake Belting Co.....	11	Morgan Spring Co.....	22
Aerostatic Power Co.....	9	Chester Steel Castings Co.....	20	Morse Twist Drill & Mch. Co..	16
Aetna Standard Iron & Steel Co..	22	Chicago Belting Co.....	10	Morse, Williams & Co.....	20
Alabama Bridge & Boiler Co.....	6	Christiana Machine Co.....	29	Morton Mfg. Co.....	9
Albany Steam Trap Co.....	15	Chrome Steel Works.....	21	Mueller, H., Mfg. Co.....	29
Alber & Byrne.....	6	Cincinnati Corrugating Co.....	23	Muirhead, John, & Sons.....	31
Albro, E. D., Co.....	26	Cln., Hamilton & Dayton R. R....	8	Muirhead Machine Works.....	*
Alexander Bros.....	10	Cincinnati Safe & Lock Co.....	10	Munnerlyn, J. P.....	18
Alford, A. G., Sporting Goods Co..	25	Clark, W. J., Co.....	9	Murray, James, & Son.....	30
Allen, W. S.....	19	Clayton Air Compressor Works...	34	O	
Alpha Paint & Mineral Co.....	30	Cleveland, Lorain & Wheeling Ry.	8	Ober Lathe Co.....	27
Alsing, J. R., Co.....	23	Cleveland Wire Spring Co.....	22	Otto Gas Engine Works.....	*
American Balance Slide Valve Co.	16	Climax Mfg. Co.....	21	P	
American Cotton Oil Co.....	16	Coburn Trolley Track Mfg. Co....	28	Painter, J., & Sons Co.....	6
American Diamond Rock Drill Co.	31	Cohoes Iron Fdy. & Mch. Co.....	23	Pancoast, Henry B., & Co.....	32
American Emery Wheel Works....	21	Coit, Henry A.....	35	Park Department.....	19
American Impulse Wheel Co. of N.Y.	59	Columbia Water Power Co.....	18	Parkhurst Bros. & Co.....	6
American Mfg. Co.....	29	Columbus Machine Co.....	9	Paxson, J. W., Co.....	9
American Pipe & Foundry Co.....	34	Commercial Electric Co.....	33	Peacock, Geo.....	30
American Promoting & Trust Co..	39	Commercial Wood & Cement Co..	6	Peck-Hammond Co.....	16
American Ship Windlass Co.....	59	Committee on Drainage.....	17	Penberthy Injector Co.....	1
American Stoker Co.....	14	Conard, Thos. P.....	19	Pettee Machine Works.....	25
American Supply Co.....	*	Contractors' Plant Mfg. Co., Ltd..	14	Phila. Machine Screw Works.....	15
American Well Works.....	29	Corbett Mill Supply Co.....	6	Philadelphia Steel Roofing Co....	23
Ames Iron Works.....	12	Cordesman Machine Co.....	26	Phos. Bronze Smelting Co. Ltd....	1
Andrews, A. H., & Co.....	1	Cordesman, Meyer & Co.....	27	Pierce, George M.....	23
Andrews, Perry, & Bro.....	29	Cortright Metal Roofing Co.....	23	Pittsburg Feed-Water Heater &	
Apollo Iron & Steel Co.....	16	Cover Mfg. Co.....	22	Engineering Co.....	15
Armitage Mfg. Co.....	23	Cox, Justice, Jr.....	19	Pittsburg Locomotive Works.....	21
Atkins, E. C., & Co.....	27	Crompton & Knowles Loom Wks. 4, 5	25	Pittsburgh Plate Glass Co.....	23
Atlanta Envelope Co.....	16	Cronk Hanger Co.....	1	Playford Stoker Co.....	14
Atlanta Terra Cotta Co.....	17	Crosby Steam Gage & Valve Co....	15	P. O. Box L.....	18
B		Curtis & Marble Machine Co.....	25	Pomona Terra Cotta Co.....	17
Babcock & Wilcox Co.....	*	Cutler Mfg. Co.....	6	Pope Reversible Street Roller Co.	31
Baeder, Adamson & Co.....	9	D		Porter, H. K., & Co.....	21
Baer, Richard P., & Co.....	*	Dallett & Co.....	19	Poulter & Co.....	19
Balley-Lebby Co.....	30	Davis Coal & Coke Co.....	15	Powhatan Clay Mfg. Co.....	17
Balley, John T., & Co.....	16	Davis Foundry & Machine Works. †	1	Praray Chas. A. M., & Co.....	6
Baird, C. R., & Co.....	19	Davis, Franklin F.....	27	Pratt, N. P., Laboratory.....	6
Baldwin Locomotive Works.....	21	Davis, G. M., & Son.....	*	Pratt & Whitney Co.....	20
Ball Engine Co.....	12	Dean Bros. Steam Pump Works...	28	Price & Co.....	26
Baltimore, Chesapeake & Richmond		De Loach Mill Mfg. Co.....	27	Price & Heald.....	26
Steamboat Co.....	8	Dempwolf, C. H., & Co.....	1	Providence Machine Co.....	25
Baltimore Engraving Co.....	32	Detroit & Cleveland Steam Nav. Co	1	Pulsometer Steam Pump Co.....	28
Baltimore & Ohio R. R.....	8	Detroit Lubricator Co.....	9	Q	
Baltimore Steam Packet Co.....	8	Disston, Henry, & Sons.....	1	Queen City Printing Ink Co.....	30
Baltimore Storage & Light. Co.....	8	Dixon, Jos., Crucible Co.....	34	R	
Barber Asphalt Paving Co.....	17	Dobbie Foundry & Machine Co....	20	Radford, Va. Board of Trade.....	18
Barnes, W. F. & John, Co.....	*	Dopp, H. Wm., & Son.....	16	Rand Drill Co.....	29
Barnett, G. & H., Co.....	34	Doubleday-Hill Electric Co.....	19	Rawson Electric Co.....	33
Bates, James, Sons.....	6	Dow Wire Works Co.....	22	Reading Electrical Mfg. Co.....	33
Beach, H. L.....	*	Draper Co.....	24	Record Printing House.....	1
Beckley, A. J., & Co.....	31	Draper Machine Tool Co.....	20	Reid, Thorburn.....	6
Benjamin Iron & Steel Co.....	19	Dufur & Co.....	22	Remington Machine Co.....	*
Berryman, James.....	13	Dunning, W. D.....	17	Reuter & Mallory.....	19
Bertach & Co.....	23	E		Rhoads, J. E., & Sons.....	11
Bealy, C. H., & Co.....	34	Earl & Wilson.....	18	Richmond Electrical Works.....	33
Birmingham Boiler Works.....	15	Easton & Burnham Machine Co....	25	Riley's, John F., Machine Works..	19
Black Mfg. Co.....	8	Eccles, S., Jr.....	26	Robbins & Myers Co.....	33
Blanchard, A.....	19	Egan Co.....	*	Robertson, Jas., Mfg. Co.....	30
Bliss Co., E. W.....	20	Electrical Engin'ring & Supply Co.	33	Robinson, J. M., & Co.....	23
Boomer & Boschert Press Co.....	17	Electricity.....	18	Robinson, Wm. C., & Son.....	8
Boston Belting Co.....	10	Ellis, C.....	17	Robinson & Orr.....	19
Bouldin, E. E.....	18	Ellis & Helfenberger.....	22	Room 450.....	18
Box 24.....	18	Empire Paint & Roofing Co.....	2	Ross, G. E.....	18
Bradford Belting Co.....	11	Empire, Edward E.....	6	Rowley & Hermance Co., Branch..	26
Bradford Mill Co.....	30	Etting, Edward J.....	18	Royal Bag Mfg. Co.....	1
Bradley Pulverizer Co.....	31	Eureka Fire Hose Co.....	11	Ruger, J. W. Mfg. Co.....	13
Bradstreet Mercantile Agency.....	8	Everson, B. M.....	19	Russell & Co.....	31
Brickenstein, L. B.....	6	Excelsior Knitting Mch. Mfg. Co. 24		S	
Brooks, T. H., & Co.....	23	Exchange Banking & Trust Co....	17	Samson Steel Belt Hook Co.....	16
Broomell, Schmidt & Co., Ltd.....	15	F		Saunders, D., Sons.....	21
Brown-Blerce Co.....	8	Fairmount Machine Co.....	24	Sawyer Hardware & Supply Co....	26
Brown Cotton Gin Co.....	25	Falkel, A.....	17	Schieren, Chas. A., & Co.....	11
Brown Hoisting & Con. Mch. Co....	14	Farquhar, A. B., Co., Limited.....	26	Schneider & Trenkamp Co.....	10
Brown, John Crosby.....	59	Farr Telephone Co.....	33	Scott & Williams.....	24
Brown, Lucius P.....	6	Fay, J. A., & Co.....	27	Scranton Corundum & Emery	
Brown & Sharpe Mfg. Co.....	21	Featherstone's, John, Sons.....	14	Wheel Works.....	21
Buckeye Engine Co.....	13	Felt & Tarrant Mfg. Co.....	*	Seidel, R. D.....	6
Buckeye Iron and Brass Works...	25	Fernandina Oil & Creosote Works..	26	Shawinigan Water & Power Co....	18
Buffalo Forge Co.....	34	Field Tool Co.....	20	Shultz Belting Co.....	34
Burr Manufacturing Co.....	9	Fitz-Hugh & Co.....	19	Simpson, H. F.....	34
Bush, J. C.....	17	Foss Gas Engine Co.....	13	Simpson, J. S. & G. F.....	31
Bushnell, G. H., Press Co.....	24	Foss Mfg. Co.....	*	Sinclair, S. H., Co.....	17
Byers, Jno. F., Machine Co.....	14	Forbes, W. D., & Co.....	13	Situations Wanted.....	17
C		Fort Wayne Electric Corporation..	33	T	
Caldwell, H. W., & Son Co.....	4	Forsythe, A. A.....	17	Tanite Co.....	*
Cameron, A. S., Steam Pump Wks..	28	Fossick Co., T. L.....	6	Taylor, James Knox.....	17
Cameron & Barkley Co.....	30	Foster, F. W.....	18	Taylor, Stiles & Co.....	27
Capital City Machine Works.....	9	Freese, E. M., & Co.....	20	Thayer, J. A., & Co.....	18
Carborundum Co.....	21	French, Saml. H., & Co.....	*	Thompson & Bushnell.....	13
Cardwell Machine Co.....	25	Frick Co.....	14, 19	Toomey, Frank.....	19
Carlisle, Thomas, Sons.....	19	Froehling, Dr. Henry.....	6	Tower & Wallace.....	8
Carnell, George.....	20	Fuel Economizer Co.....	14	Trenton Iron Co.....	4
Caroline Iron Works.....	30	G		Trevor Mfg. Co.....	26
Carr, Stuart R., & Co.....	34	Galt, John, & Sons.....	23	Triumph Electric Co.....	31
Carver Cotton Gin Co.....	24	Gandy Belting Co.....	11	Tudor Boiler Mfg. Co.....	13
Case Mfg. Co.....	14	Gardner Governor Co.....	*	U	
Castner, Curran & Bullitt.....	15	Garrett, C. S., & Son.....	23	Union Iron Works Co.....	*
Central Mfg. Co.....	32	General Electric Co.....	33	United Electric Improvement Co..	33
C. & B. Line.....	8	General Fire Extinguisher Co....	6	Utica Electrical Mfg. & Supply Co.	32
Chambersburg Engineering Co.....	27	Gilbert, C. M., & Co.....	6	V	
Chapman, Wm. A., & Co.....	6	Golden's Foundry & Machine Co..	22	Valk & Murdoch Iron Works.....	14
Charleston (S.C.) Bureau of Freight		Goodell & Waters, Branch.....	27	Valley Iron Works.....	*
and Transportation.....	16	Gowdey, J. A., & Son.....	24	Vandusen Co., E. W.....	29
Charlotte Machine Co.....	25	Graphite Lubricating Co.....	34	Vulcan Works.....	24
Chattanooga Machinery Co.....	26	Griffing, A. A., Iron Co.....	4	W	
I		Grosse, L., Art Glass Works.....	4	Walker & Elliott.....	30
J		Gulifoux & Blanc.....	6	Warren Chemical & Mfg. Co.....	1
K		H		Watson, Benjamin.....	9
L		Haines, William S., Co.....	4	Webster, Warren, & Co.....	9
M		Hales & Ballinger.....	6	Weir Frog Co.....	2
O		Hall Steam Pump Co.....	29	Wells Light Mfg. Co.....	8
P		Hambleton & Co.....	59	West Mfg. Co.....	27
Q		Hammacher, Schlemmer & Co.....	9	Western Electric Co.....	25
R		Hanson & Van Winkle Co.....	33	Western Maryland Railroad.....	1
S		Harrington & King Perforat'g Co..	4	Westinghouse Air Brake Co.....	1
T		Hartford Steam Boiler Inspection		Westinghouse Elec. & Mfg. Co....	33
U		& Insurance Co.....	25	Westinghouse Machine Co.....	13
V		Hartzell Novelty Works.....	17	West Pulverizing Machine Co....	31
W		Hayes Construction Co.....	6	West Pascagoula Creosote Works..	24
X		Hazard Mfg. Co.....	4	Whitinsville Spinning Ring Co....	24
Y		Help Wanted.....	17	Whitmer, Wm., & Sons, Incorp....	26
Z		Hench & Dromgold.....	27	Whitney, Baxter D.....	27
AA		Hendrick Mfg. Co., Limited.....	*	Wilkinson Mfg. Co.....	14
AB		Heyward, Julius H.....	18	Williams Bros.....	24
AC		Hickman, Williams & Co.....	9	Williams, Haskins, & Co.....	13
AD		Hicks, F. M.....	19	Williams, I. B., & Sons.....	11
AE		Hieritz, Theo., & Son.....	20	Williams, John L., & Sons.....	39
AF		Hill & Howard.....	6	Williams Pat. Crusher & Pulv. Co.	39
AG		Hirsch, L. K.....	19	Williamson, Jas. N., & Son.....	19
AH		Holmes, E. & B., Machinery Co....	26	Willis, E.....	17
AI		Holmes Fibre Graphite Mfg. Co....	20	Wilmington Iron Works.....	24
AJ		Holt, S. L., & Co.....	19	Wilson Laundry Machinery Co....	17
AK		Homer, F. E., & Co.....	33	Wisconsin Machinery Co.....	9
AL		Hoopes & Townsend.....	27	Wolf Co., The.....	26
AM		Howes, S., Co.....	30	Wolf Co., Fred. W.....	14
AN		Hutchins House.....	6	Wood, R. D., & Co.....	25
AO		Huther Bros.....	1	Worthington, Henry R.....	21
AP		I		Wright Co., The.....	29
AP		India Alkali Works.....		Wrightsville Hardware Co.....	6
AP		Ingersoll-Sergeant Drill Co.....		Y	
AP		International Corres. Schools.....		Z	
AP		J		AA	
AP		Jackson Mfg. Co.....		AB	
AP		Janney & Steinmetz.....		AC	
AP		Jeanesville Iron Works Co.....		AD	
AP		Jeffrey Mfg. Co.....		AE	
AP		Jenkins Bros.....		AF	
AP		Jenkins & Lingle.....		AG	
AP		Jewell Belting Co.....		AH	
AP		Johns, H. W., Mfg. Co.....		AI	
AP		Johnston & Nelson.....		AJ	
AP		Joseph, Jos., & Bro.....		AK	
AP		K		AL	
AP		Keeler, E., Co.....		AM	
AP		Kelly, O. S., Co., The.....		AN	
AP		Keystone Crusher & Roller Co....		AO	
AP		Keystone Engine & Mach. Works..		AP	
AP		Klechner Mfg. Co.....		AS	
AP		Kilbourne & Jacobs Mfg. Co.....		AT	
AP		Kilburn, Lincoln & Co.....		AV	
AP		Kile, George W.....		AW	
AP		Klipstein, A., & Co.....		AX	
AP		L		AY	
AP		Lambert Gas & Gasoline Eng. Co.		AZ	
AP		Lambert Hoisting Engine Co.....		BA	
AP		Lane & Bodley Co.....		BB	
AP		Lane Manufacturing Co.....		BC	
AP		Larzelere Machine Co.....		BD	
AP		Lathbury & Spackman.....		BE	
AP		Lawrence, W. W., & Co.....		BF	
AP		Leffel, James, & Co.....		BG	